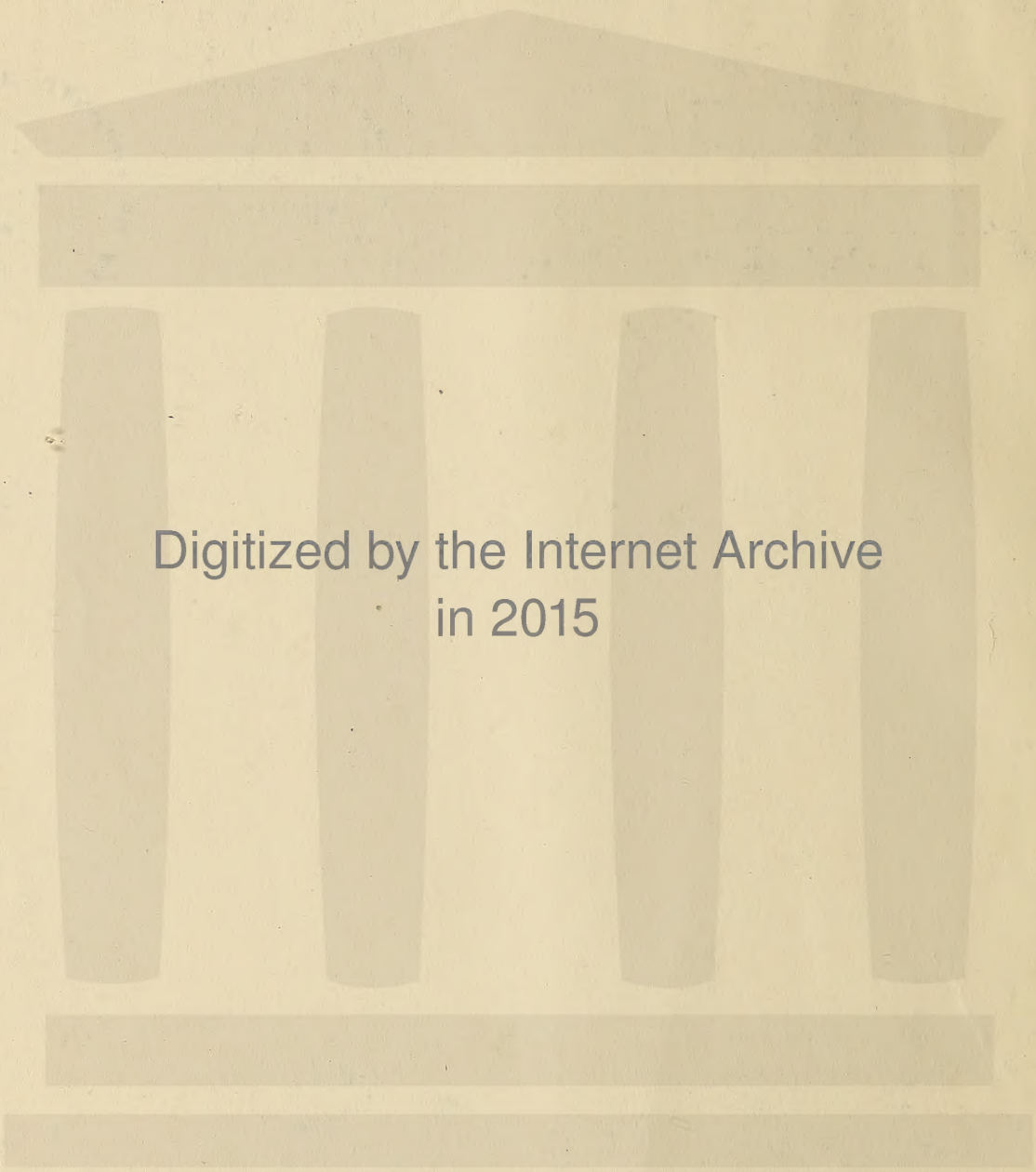
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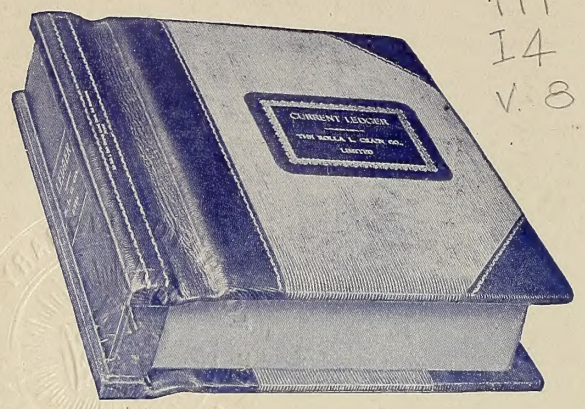
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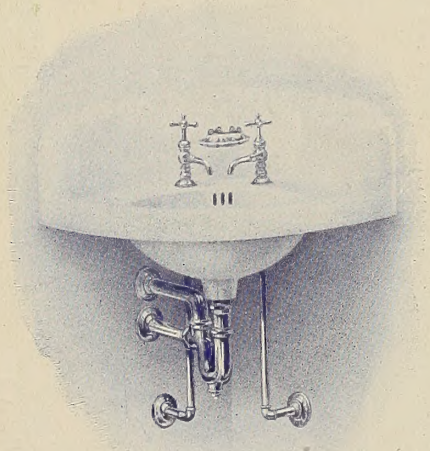
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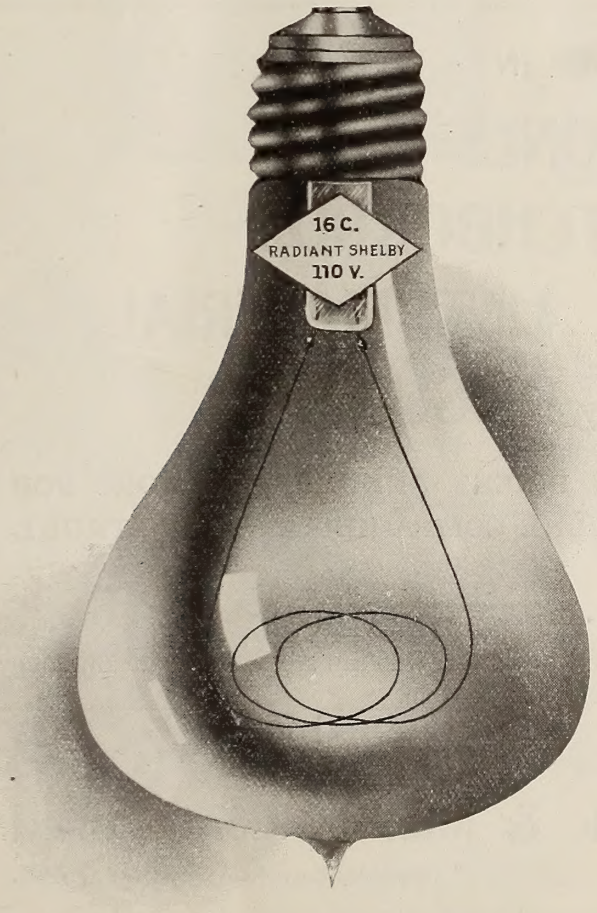
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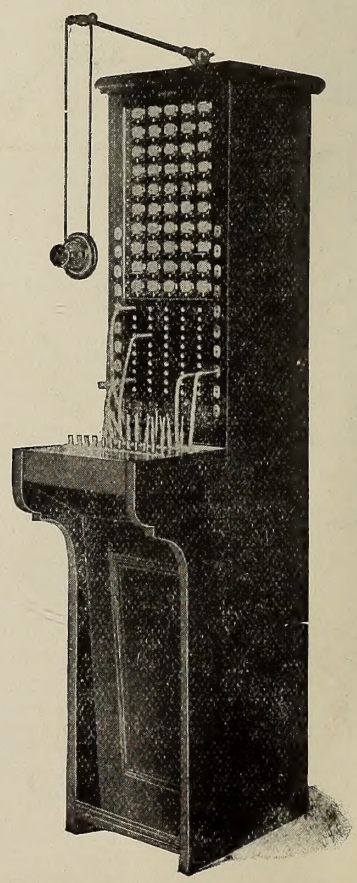
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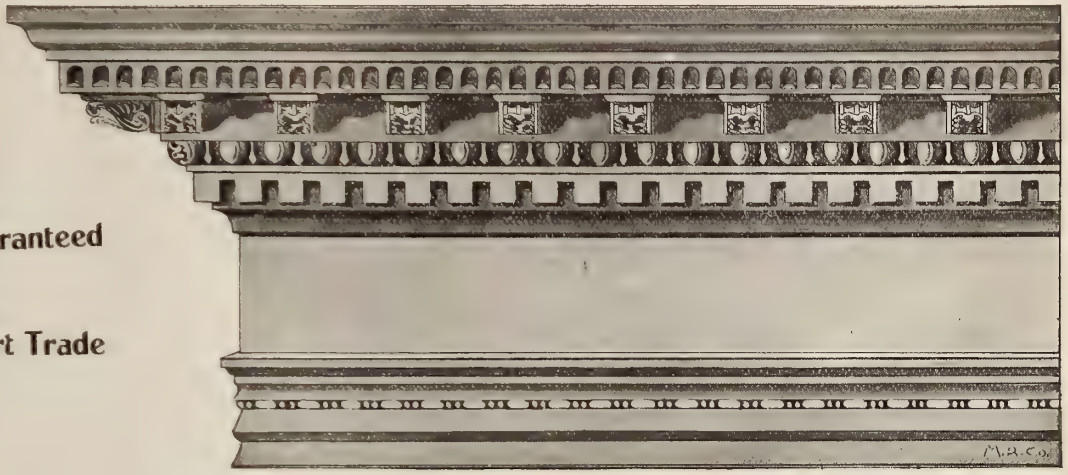
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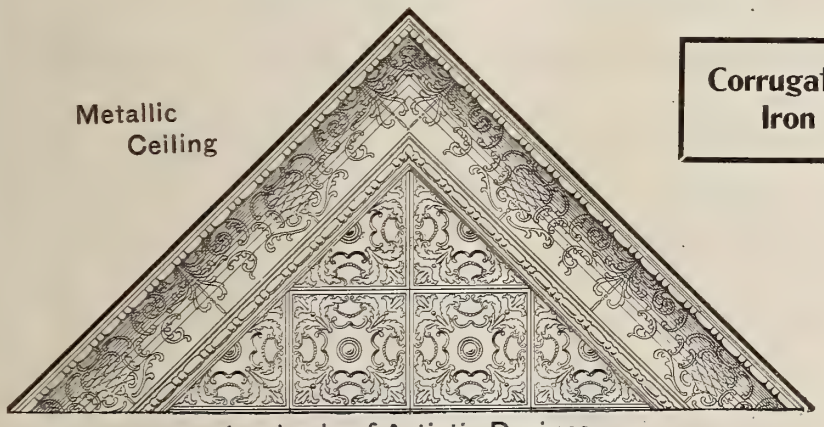


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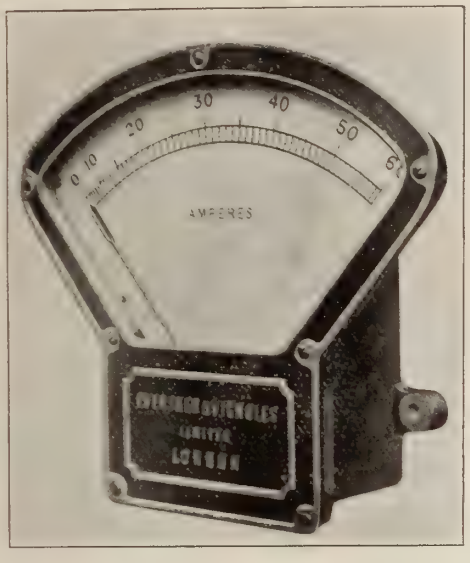
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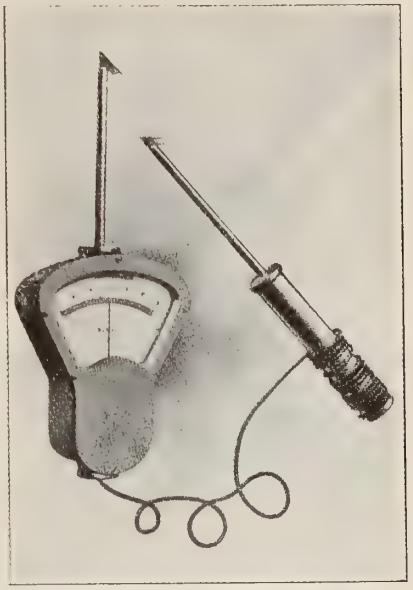
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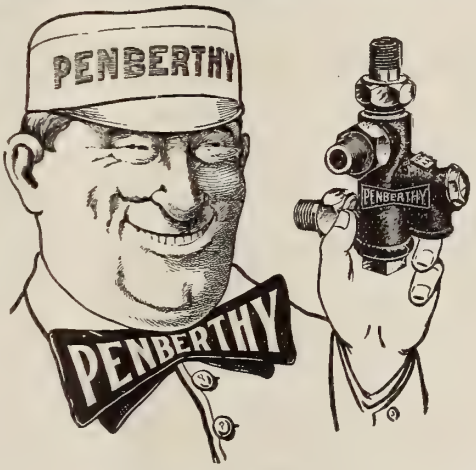
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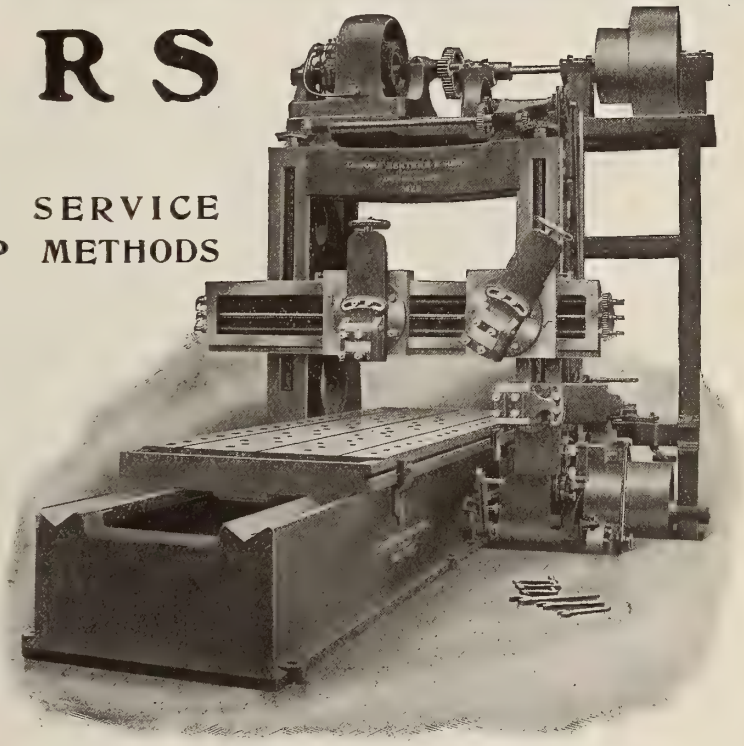
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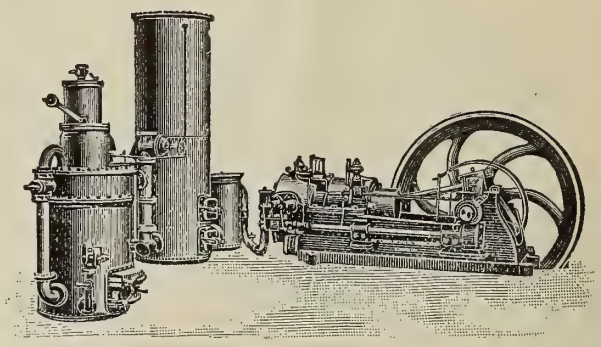
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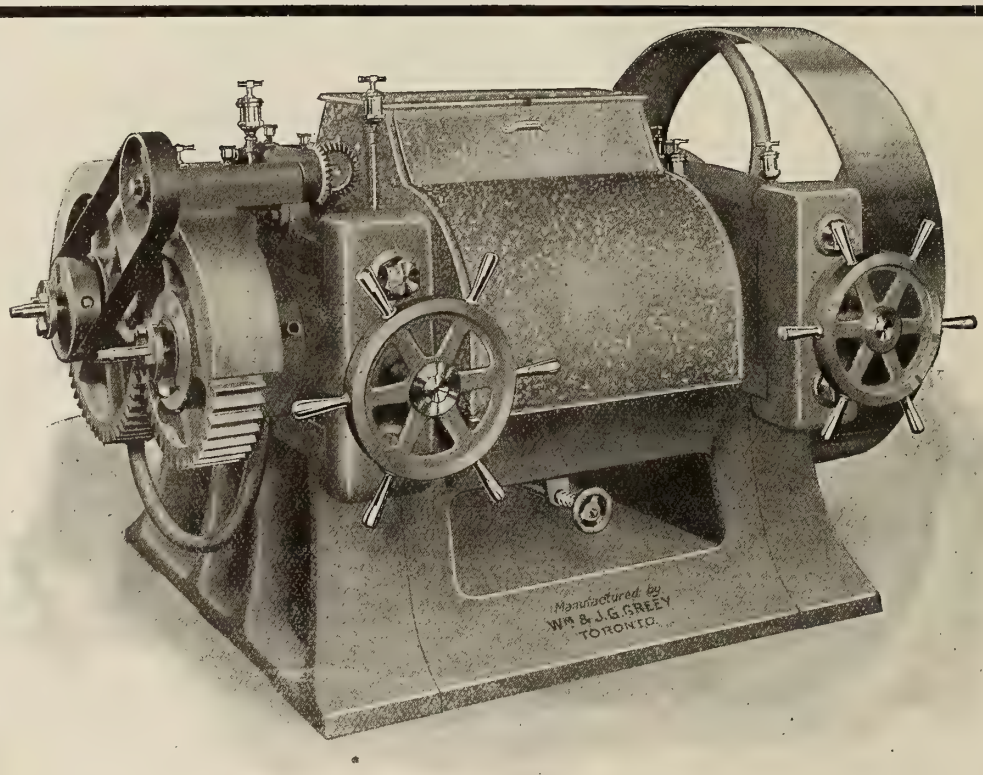
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The Canadian Manufacturers' Association,

Incorporated,

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Vol. VIII. TORONTO, AUGUST, 1907 No. 1

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

COMMITTEE.

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S. R. Hart. C. R. McCullough. S. M. Wickett.
R. A. Donald. J. M. Sinclair. J. J. McGill.
And the General Officers of the Association (Ex-officio).

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THE 1907 CONVENTION.

THE present issue marks the close of another year in the Association's life, a year whose story of deeds accomplished will one day be written large in the industrial history of the country. Every department has bristled with activity. Every committee has worked loyally and faithfully. Every officer has given to the Association the best that was in him.

The united result of their efforts will be embodied in the various reports to be presented to the annual meeting, which will be held in the King Edward Hotel, Toronto, September 24th to 26th next. These reports will be worth coming across Canada to hear. They will contain no padding—the record of results achieved leaves no room for anything of the sort—but will be brimful of meat, each item a crisp, business-like statement of fact, involving dollars to every member of the Association.

Interesting and instructive addresses are promised at convenient intervals during the business sessions. They will be delivered by men who are recognized authorities in their several departments. Reforestation, reciprocal demurrage and industrial education are three of the subjects to be dealt with. All are of vital importance to the manufacturing community.

An elaborate programme of entertainment will keep the spare moments fully occupied, while the closing banquet will, according to the committee in charge, eclipse anything of the kind ever before attempted in Toronto.

Remember the date—September 24th to 26th—and promise yourself the pleasure of attending. You will be well repaid.

MANUFACTURERS' CONTRIBUTION TO NATIONAL PROSPERITY.

NOT the least interesting feature of the census reports that are now being given out, is the increase in wages paid by manufacturing establishments to employees. The enormous total of over one hundred and sixty-four million dollars ($164,394,490) paid out in the year 1906 for labor alone is a telling indication of the importance of Canada's manufactures. A comparison for the years 1901 and 1906 is instructive. In the former year the census shows 344,035 wage-earners, receiving $113,249,350 in wages. Five years later these figures have advanced to 391,487 and $164,394,490, respectively.

Two points are outstanding in these comparative statements. One is the immense amount of money distributed annually by manufacturers for labor. The second is the great advance in the individual earnings. In 1901 the average wage per year for all employees was $329.18; in 1906 the average wage was $419.92. The increase averaged $90.74, or over 27 per cent. These are points which must be considered in estimating the country's prosperity. When manufacturers urge the importance of so fixing the tariff that the industries will be given a chance to live, they are at times met with the argument that on the farmers depends the prosperity of the country. Having made such a general and, to themselves, convincing statement of their economic views, the low tariff advocates feel that further argument is useless; as, indeed, it is from their standpoint. But the figures before us put a somewhat different complexion on their statements. For instance, we may assume that a wage-earner represents a family of four on the average. The returns then show that 1,565,948, practically a fourth of the total population, are directly dependent upon manufacturing for their livelihood. But this does not express the whole truth. The returns are for establishments employing five or more hands. There are the countless small shops, where from one to four work, differing merely in degree from their bigger neighbors. They all pay workers for work that may be done in some other country, if tariff conditions are unfavorable enough here. Add to these the miners of coal and iron and other minerals, and the many other subsidiary activities which with shopkeepers, financial institutions and professional men represent a small army of workers.

Not that there is any tendency to minimize the importance of agriculture. It is a necessary element in the country's prosperity. Besides being productive itself, it supplies a market for much that is manufactured. But there is a correlation between industries, and the mere mention of the amount of money set in circulation among laborers shows the large part manufactures play in the general advancement.

Canada has been enjoying a period of prosperity. Who will say that the manufacturers have not contributed as much to that prosperity as they have received from it? The Government returns bear eloquent testimony to the benefits the workingman has reaped. He has been able to buy liberally of the products of the farm. The money that has been set in motion by the employer has circulated throughout every part of the country, to the advantage of the whole. There is not a citizen of Canada who is not the better for the industrial prosperity of the past few years.

Would not the country be proportionately better off if more manufacturing establishments were situated here? If instead of four hundred thousand employees there were a million, and instead of a million and a half paid out in wages there were three or four million? This is no idle dream. It could be done. Canada consumes enough manufactures to employ this number. If the tariff were high enough it would be accomplished.

DISCRIMINATION IN CIVIC PURCHASES.

THE citizens of Toronto periodically pay for the demagogic methods of some of their representatives. Recently it developed that no tenders were received from Toronto manufacturers for certain municipal supplies. The reason was that the specifications contained a clause requiring union wages to be paid on all work in connection with the contract. The local manufacturers could not fairly bind themselves in any such way. As a consequence competition was narrowed, which, in the long run, at any rate, will result in higher prices being paid by the people.

The crux of the situation does not centre around a choice between sweat-shop methods and fair wages. No citizen wants, or has a right to ask for, civic supplies which have been produced other than under fair conditions of labor. Sweat-shop methods are disappearing from Toronto, nor did they ever enter into the products which the city buys to any material extent.

The merging of the question of unfair and fair wages and unfair and union wages has clouded the original problem. In making a demand for union wages the city authorities go beyond all reason. The union scale is not struck at what is considered a fair figure. It is set at absolutely the highest figure which the union can obtain. If the employers are "up against it" in the matter of getting out work, the union will force up the scale. If conditions of demand, or transportation, or any thing else, are favorable to the union, a demand for higher wages follows.

Thus the "fairness" of the wage, in the sense of its having a fixed relation to the work done and the cost of living, is a myth. A fair wage and a union wage are not interchangeable terms.

Manufacturers are straightforward and consistent in their refusal to subscribe to such conditions. The company who are supplying goods have, in nine cases out of ten, only done a tithe of the total work on them. What they have received as a raw material has passed through probably a dozen hands before them. How can the last man say whether fair wages or union wages were paid on the earlier operations or not?

The controllers or aldermen who are responsible for the present regulations have acted most unfairly. The union wage clause is an example of rank discrimination. Toronto has in its body of citizens many men who are not members of unions. Why should their work be refused by the city, while that of another class is accepted? Their work may be just as good or better. Membership in a union is not a certificate of efficiency. They may be law-abiding, industrious citizens; yet the product of their labor will not be accepted by the city. And Toronto has to go outside for its supplies. This dog-in-the-manger attitude of the unions, which they have succceded in foisting off on a weak-kneed Council, works no good to the city, but much harm. Class legislation was ever pernicious.

JAPANESE IMMIGRATION.

MR. R. G. MACPHERSON, M.P., has taken strong ground on the question of Japanese immigration into Western Canada. Mr. Macpherson is in a good position to estimate the effects of Asiatic immigration, as he is a resident of Vancouver and represents the city in the Federal Parliament. The objection he makes is that the Japanese coolie is an inferior type and cannot be assimilated by the white residents. Hence he is not only a disturbing influence in industrial circles, but he is a menace to the moral life of the whites, as is invariably the case where higher civilization is brought into contact with an inferior people.

The question is a difficult one to face, yet it is of such great importance that it must be considered by the Canadian Government. Nor does it rest alone with the Canadian authorities. Their hands are practically tied by the British treaty with Japan, which makes the treatment of the Japanese one of Imperial import. It may fairly be questioned whether the British Government were justified in effecting a treaty which would compromise the action of a colony to such a vital extent as this has done.

Not that the advisability or the reverse of Japanese immigration has been satisfactorily settled yet. Canada, especially in the West, has a great need for cheap labor. We have almost illimitable natural resources waiting development; we have enormous tracts of agricultural lands needing but a railroad to change them into smiling wheat-fields. Japanese can be used to great advantage in these works. Moreover, the question of servants is more difficult in the West even than in the East. Asiatics have proven themselves willing and capable in this capacity.

The material advancement of the country is much; but the moral calibre of its inhabitants is more. In developing our resources with Asiatic labor, are we paying too high a price for our material prosperity? After all, our Western population is still comparatively small. There does not appear to be the slightest possibility of an admixture of the races. Still "East is East, and West is West, and never the twain shall meet." We are of a different civilization from them, and so we must count on having them live among us but not of us, not understanding our principles or motives. This is the danger to which Mr. Macpherson draws attention.

It is, as we have said, far from being an easy problem to solve. Japan is joined to the Empire by a particularly strong bond. The conditions surrounding Japanese immigration apply equally, if not to a greater extent, to natives of India, who profess the same allegiance as we. What is the solution? Are the effects on the character of our people likely to be such that exclusion is advisable, even at the cost of a labor supply that we urgently need? Or are the fears of those whose point of view Mr. Macpherson represents exaggerated? These are questions for our statesmen to consider.

SOME IMPORTANT RULINGS.

SPECIAL attention is called to the articles in this issue of INDUSTRIAL CANADA, outlining the changes which have been effected by the recent decisions of the Railway Commission. Not since the establishment of the Board has a decision been given having such widespread and important influence as have the findings in the International Rate Case and the New Classification.

The favorable orders which have now been made are the result of vigorous efforts carried on by the Canadian Manufacturers' Association ever since the inauguration of its transportation department. The results attained and the persistent work required during the many months while the negotiations were taking place, amply illustrate the necessity of having some organized machinery for taking up such problems. No single shipper has the time or the facilities for undertaking such a work.

The International Rate Case was based primarily on the "long and short haul clause" of the Railway Act. Up to the present time shippers in Windsor have been compelled to pay higher rates to points in Eastern Canada than competitors in Detroit. The same inequality extended to all shipping points in Western Ontario. The railways attempted to cover up the manifest unfairness of the tolls by introducing arguments based on the question of competition. However, the Act is explicit on the point, and the present decision of the Board is only putting into force a principle which exists within the law itself. A charge cannot be greater for a short haul than for a longer haul along the same line.

The saving to shippers will be very great, although the rates are not yet as low as they should be. A reference to the order, which is printed in another column, will show under what a burden manufacturers and others have been laboring. In many cases the railways have, by their high rates to Canadians, nullified the effects of the tariff as a protection to industry. The substantial reductions will be welcomed as a very tangible relief under existing circumstances.

Of even greater importance to the shipping public is the order calling for the adoption of the new classification not later than September 1st. This order is far-reaching in its effect. There has been no general revision of the classification for years. As an inevitable consequence the present classification is anything but scientific. The radical change in the owner's risk clause, by which two hundred and forty items have had this condition removed, shows the general tendency of the new regulations.

A NEW SPHERE OF USEFULNESS.

AT its annual meeting the Canadian Manufacturers' Association will be asked to approve of the establishment of a department for the collection of overdue accounts, to be operated along lines, details of which are now being worked out by the Commercial Intelligence Committee.

This important service is one from which every member will be able to derive a direct benefit. Bad debts are bound to be contracted, in spite of the greatest care, and once contracted they are a source of untold worry and annoyance. No business house but has its share of them, and few indeed are those that do not at some time or other make use of the collecting agency. The Agency furnishes a convenient method of disposing of a task that is generally regarded as distasteful, added to which it has the advantage of being able to produce results when the individual alone is often unsuccessful.

The Association now proposes to constitute itself such an agency for the benefit of its members. And it does so under circumstances which promise well for the success of its operations.

Many a debtor who pays little or no attention to the average dunning letter will think twice before he refuses to give heed to the polite request of the solicitors for the Canadian Manufacturers' Association. To men of this stamp credit is everything, and they will probably surprise even themselves by their ability to raise the needful when confronted with the threatened destruction of their credit rating among all the big manufacturing houses of the Dominion.

In conjunction with the above it is also proposed to have the Association act for members in winding up insolvent estates. Prompt and concerted action on the part of creditors would frequently be the means of checking the frauds that are perpetrated before assignment. Such frauds ought not to go unpunished, yet the individual rarely cares about taking the initiative. But what the individual hesitates about doing the Association can do without fear, and it would doubtless be found that a few rigid prosecutions would exert a most salutary influence in checking a practice that is all too common.

The advantages of such a department are almost too obvious to call for explanation. The wonder is that the Association has never taken the matter up before. Its adoption now, however, after so much has been done in the fields of insurance, transportation, legislation, etc., furnishes new evidence of the fact that the Association is not yet done growing. By personal services of this kind it is steadily strengthening its hold on the manufacturers of Canada and acquiring for itself an influence and a prestige wielded by no other business organization in the Dominion.

THE MAXIMUM OF PROSPERITY.

THERE are no complaints by manufacturers about the prevailing prosperity. The fact that most manufacturing plants are running to their utmost capacity is ample proof that manufacturers are not taking a selfish view of things when they deplore the great amount of manufactured goods which are being imported annually into Canada. It probably means much less to the manufacturers if more industries are started here than it does to the farmers. To the former it means greater competition at their very doors, with more difficulty in the securing of an adequate labor supply. To the latter it means a greater demand for the products of the farm, and consequently quicker and better returns.

But when we consider the material benefits which have been conferred on the municipality and the surrounding country by the establishment of such works as the Canadian Westinghouse plant in Hamilton, the Pratt & Whitney factory in Dundas, and several other branches of United States companies, we can realize what we lose by not having many others who are now manufacturing in the United States and selling in Canada. For every million dollars' worth of goods we import we are supporting in a foreign country an industrial army of workmen and officers. Through these money is regularly put in circulation, helping merchants, farmers and manufacturers. It is the absence of these, which are within our reach, that is the subject of complaint. It is purely a question of tariff. If manufacturing abroad were discouraged they would operate on this side of the line, employing many men, developing subsidiary industries, giving additional business to transportation companies, and encouraging the settlement of the country.

The great need of Canada, we have been told time out of mention, is population. The sparseness of the country's

settlement works to the disadvantage of all. Up to a certain extent, at least, density of population tends to economy and efficiency of service. Transportation facilities increase, postal, telegraph, telephone and express services become more frequent and better, the provision of necessary supplies and luxuries becomes easier. More factories will play their part in bringing about the desired end. They will dot the country with towns, which will be centres of mercantile and educational life; and they will encourage the settlement of the now uncultivated agricultural lands. Manufacturers do not want prosperity at the expense of the farmer. They recognize that the truest prosperity will result from a harmonious growth of all classes.

CANADA'S FISHERIES.

THE monetary value of Canadian fisheries is discussed by the Montreal *Witness*, in a comment on a recent statement that, with proper care, the waters of Canada can be made to yield a yearly output in value in excess of our total possible agricultural output. "If," it says, "there really are such wonderful possibilities in our Canadian fisheries, which only require 'proper care' in order to make them available, it would seem to be the part of wisdom in Canadians to see that the proper care was given them, for although our fisheries have been developed for centuries, yet the value of their annual output does not now equal that of our cheese factories, which are but the growth of one-quarter of a century. Although nearly four million dollars has during the past twenty-five years been paid in the form of bounties to Canadian fishermen doing business on the eastern coasts of the Dominion, yet the value of the salt water fish, including oysters and lobsters, caught annually has shown but a trifling increase during that time, and the fishermen belonging to the Province of Quebec have a greatly diminished output to show now, compared with what they had twenty-five years ago. Owing to the operations of fish hatcheries, the fresh water fisheries of Ontario have been increasing their annual output considerably of late, yet there seems to be room for a manifold greater increase in that quarter. The older inhabitants can still remember the time when Atlantic salmon were to be found in abundance in the little rivers and streams emptying into Lake Ontario, and there seemed to be no limit to the supplies of whitefish and salmon trout in that lake. What is the condition of things at present? The Atlantic salmon have long since forsaken Ontario waters, and the whitefish and the salmon trout have become few and far between in Lake Ontario. The numerous American and Canadian fish hatcheries, situated on the shores of the upper lakes, are now sending hundreds of millions of fry yearly into those waters. This has already greatly improved the fishing there, yet so long as the sawdust nuisance is permitted to pollute the streams the products of the Canadian fisheries will continue to be of small account in comparison with Canadian agricultural products. The total value of all the fish caught—not including lobsters and oysters—during the year 1900, in the four provinces of Quebec, New Brunswick, Nova Scotia, and Prince Edward Island, was $11,411,338. The value of the lobsters secured was $3,055,350, and of the oysters the value was $155,680. The value of the fish caught in the waters of Ontario in the year 1900 was $1,333,294; in Manitoba and the Territories the value of fish caught was $718,159, and in British Columbia the value of the fish and fur seals caught was $4,878,820. The expenditure by the Government in connection with the fisheries during the fiscal year ended June 30th, 1901, was $491,569, the chief items of expenditure being $158,802 paid in bounties to the fishermen, while the fisheries protection service cost $121,211. The Government revenue, fines, license fees, and so forth, derived from the fisheries in the year was $88,145."

OUR ADVERSE TRADE BALANCE.

COMMENTING on an article in the July issue of INDUSTRIAL CANADA, in which the serious deficiency of exports as compared with imports was pointed out, the *Weekly Sun* says that "if the argument is sound then Great Britain must already be on the commercial rocks, because in the last eleven years the imports of the Mother Country have exceeded her exports by a sum aggregating over twelve billion dollars. Even so wealthy a state as Great Britain could not stand up under an annual addition of from one billion to one and a quarter billion dollars to the national mortgage."

The *Sun* does not state the whole case. If Great Britain's wealth consisted entirely of her products, natural and manufactured, as Canada's does, then she would undoubtedly be in a serious condition as a result of this disparity. More so even than Canada, for she is no longer making capital expenditure to develop and open up a new country. It is a simple economic fact that no individual, or combination of individuals, as represented by a nation, can continue to buy more than they sell without bringing on a financial crisis, unless there are other means of revenue apart from these transactions.

What is the position before us? Great Britain buys over a billion a year more than she sells. Yes, but her revenue, in many cases as a result of this business, is annually many times a billion. British fire insurance companies take out of Canada alone eight and a half millions a year in premiums. They get probably twenty times that in the United States. These companies operate in every corner of the globe. Then there is the marine insurance, which reaches enormous proportions annually. British companies have no opposition in this field. British capital is being used in all parts of the world to build railways, to construct government works, to carry on private industries. From all of these flows in a golden stream of profits. Lastly, Great Britain takes her toll from the sea in her splendid carrying trade. These are what make an adverse trade balance of little importance to the Mother Country.

Canada has no such sources of revenue to offset a losing trade. What she buys from other countries she must repay in exchange. The money that we have to buy with comes from what we can sell abroad. Therefore, when Canada's imports exceed her exports by $76,710,048, as they did in twelve months ending April 30th, there is a debt of that much chalked up against us somewhere.

Canadian and British conditions are so fundamentally different that one cannot argue from one to the other. In settling our fiscal policy we have to look to the conditions obtaining in Canada, not in England. The *Weekly Sun* does not adduce any proof to show that our adverse trade balance is anything but dangerous.

The city of Toronto is striving to settle its water-front question. The public have reached the stage of insisting that the present level crossings be eliminated. The contest is now being waged between the advocates of bridges over the tracks and the supporters of elevated tracks. Although the latter scheme is more costly, its manifest advantages should stamp it as the more far-sighted and complete solution of the question.

Comment of the Month

New Postal Regulations.

The Post Office Department recently commenced issuing to postmasters requiring them, special newspaper wrappers for the exclusive use of publishers when prepaying postage on second class matter addressed to the United States. These wrappers, which are considerably larger than the ordinary postband, are printed in the denominations of one, two and three cents, and have the following restrictive clause : "This wrapper to be used only by publishers and for the sole purpose of mailing second class matter to the United States."

To Improve Montreal Harbors.

It will be a pretty tough proposition that will prevent the present Board of Harbor Commissioners of the port of Montreal from making that port one of the best on the continent. The services of Mr. R. C. Davidson, of London, England, have been called in to outline a plan for its improvement. Mr. Davidson is a recognized authority on engineering works of this kind. He has now come to Canada, via the St. Lawrence, in order that he may become thoroughly acquainted with the conditions existing along the route. When he has informed himself on the accommodation that is required in the harbor, he will lay before the Commissioners a scheme of improvements, which will serve as a basis for all future work. In a statement to the press he said that in all his experience he has not yet seen a river channel into the heart of a great continent, such as the ship channel between Montreal and the sea, and is quite confident that there exists no reason to prevent the port of Montreal becoming, for quickness and economy of despatch, second to none in America or Europe.

Visit of Mr. Donly.

Mr. A. W. Donly, Canada's Commercial Agent in Mexico, is now in Canada interesting the people of this country in the possibilities of trade with Mexico. Mr. Donly has been doing excellent work in his present field. He has been indefatigable in looking after the interests of Canadian merchants, and he has succeeded admirably in keeping the subject of international trade in the public eye.

His present trip should result in renewed interest. It is well for Canada's representatives to get back home occasionally, just to keep in touch with the progress which is being made, and the changing conditions which have to be met. Personal knowledge is essential.

Mr. Donly is at present making a tour of the Maritime Provinces. He is telling the merchants down there of the demand in Mexico for cement and steel rails and other manufactured goods, for Mexico is not a manufacturing country. He is also urging the importers to buy direct, and not through American middlemen. Later, Mr. Donly will visit other parts of the Dominion, and the business public will, no doubt, learn much that is of interest to them from him. The courtesy he shows in Mexico will insure him a warm welcome in Canada.

A Forward Movement.

The *Globe* (Toronto) has taken up the subject of our pulp-wood supply, and as a result of a special investigation by a staff correspondent has called upon the Federal Government to take prompt steps towards arriving at a plan of action by which our supply can be preserved and perpetuated. It is sincerely to be hoped that the Government will take the advice of the chief Liberal journal. The subject has been discussed in these columns too often to require any further elucidation at the present time. It is satisfactory, however, to note that the gravity of the case is becoming generally recognized. The importance of our timber areas is fully recognized by those interested in the paper industries of the United States. A Government investigation will soon reveal our true position.

In connection with this same discussion it may be noted that the whole subject of reforestation is meeting with general consideration. The work of the Canadian Forestry Association, the establishment of a department of forestry at the Provincial University of Ontario, and the widespread editorial notices, all point to an awakening to the importance of the movement. Public opinion is being formed, and it will go a long way in supporting any legislation looking to a betterment of existing conditions.

Relation of Railways to the Public.

The National Association of Freight Traffic Agents of the United States, composed exclusively of freight transportation men, is endeavoring to restore public confidence in common carriers, and it is proceeding in a way that cannot fail to produce good results.

Recently the president of the Pittsburgh Division of this organization invited L. C. Bihler, traffic manager of the Carnegie Steel Company, to point out from his own observation those things which are overlooked by the railroads—or only partly done—and which, if done, would please the shipping public and assist materially in establishing an era of good feeling—a thing highly desirable from the viewpoint of either interest.

Mr. Bihler discussed the subject as it appears from the industrial side, making certain suggestions regarding better or improved methods on the part of the railroads generally in handling claims for overcharge, loss or damage ; suggesting that all officials of railroads in whose possession claim papers come, such as the local agent, or any other official, should not delay or pigeon-hole papers, but should handle them promptly, so that settlement may not be unduly delayed —since it is a fact that that road which best serves its patrons is the one which does so in all respects. Prompt and satisfactory handling of claims, prompt filing of requisitions for cars, prompt movement, prompt answers to inquiries as to delayed, lost or strayed freight, and the question of necessary and unnecessary tracing of freight, were touched on, as well as frankness on the part of railroads in voluntarily notifying patrons whenever an embargo or congestion exists, in order to give the patron an opportunity to seek other more satisfactory channels temporarily while an embargo or congestion is on, and to not knowingly or wilfully solicit additional business when the railroad cannot handle through a congested period that which they already have.

The question of more co-operation between railroads and the shippers when the railroads have in mind to advance rates was also considered by Mr. Bihler, his suggestion being to the effect that, if conditions make it necessary to change or advance freight rates materially, there should be friendly co-operation first, and the industries should be permitted to know in advance, and the railroads to receive the benefit of their advice and suggestions, as to whether it would be entirely just to advance freight rates. The subject of railroads carrying out designated routing as furnished by a shipper was also gone into at length.

All of these matters are of first importance to both ship-

per and carrier. Mr. Bihler presented the shippers' side in no spirit of hostility or petulance, but in the argumentative manner of a business man who knows exactly what he is talking about. Such talks cannot fail to impress men of intelligence and reason, and we felicitate the Pittsburgh transportation men upon the breadth of mind and the quality of initiative which distinguish their organization.

Commission and Reciprocal Demurrage.

The Railway Commission recently heard representatives of the Winnipeg Jobbers' Association, and also deputations from Regina and Prince Albert, and from the Manitoba Grain Growers' Association.

After the different interests had presented their case and been replied to by representatives of the Canadian Pacific and Canadian Northern, the chairman then gave the views of the Commission on the various points brought up. The information they had received led them to the conclusion that the severity of the past winter was largely responsible for the defects in transportation, a result that had been experienced also in the East.

They had had urged upon them the question of reciprocal demurrage. Boards of Trade and shippers all over the country were advocating this. They had never attempted to deal with that definitely, or committed themselves definitely either to it or against it. They felt that for the time, at least, it was not reasonable to introduce it.

The country had had a great and sudden development of business in two or three years, unexpected by everybody, and it was not reasonable that railway companies should be ready for the unexpected condition. He did not think the companies should have on hand equipment which should be sufficient for occasions of great activity and sudden plethora, although he believed that they had not fulfilled their responsibilities in the past. Still he did not think that the method proposed of fining them for their delinquencies would be fair.

They had set an expert to investigate and advise if they had an equipment such as they should reasonably have, and if, having his advice, they failed to keep up to the standard, if they did not realize their responsibilities, some system of that kind might be the only one to fall back on; and for that reason he had suggested that the Board be empowered to make regulations providing for demurrage charges upon railway companies. He did not know whether it would be properly workable, unless the service were put under a car service bureau, independent of the railway companies, the expense of which would be borne by these demurrage charges. There was some doubt in his mind as to that.

The distribution of cars was a very difficult matter. The Board could not be expected to take the management of the distribution of railway cars, and it would be difficult to make inquiry into the distribution, as to whether it was a fair and reasonable one, but they would be obliged, as definite complaints arrived, to investigate them and to endeavor to find a remedy.

A Noted Labor Leader.

Some pertinent questions naturally arise as a result of the recent address of Mr. J. Keir Hardie before the Canadian Club of Toronto. Mr. Hardie is an interesting personage. Any man who has wrested success from the midst of difficulties is interesting. There is a strong, and, on the whole, healthy admiration for success deeply rooted in most of us. But that admiration is associated with a strong critical faculty. A man must make good. He must show that success is not an accident, but a condition. With success comes a responsibility; the necessity of doing work commensurate with one's reputation. How does Mr. Keir Hardie, how do the other leaders of his party, measure up to these requirements?

Mr. Hardie, we are told, commenced work in the mines at the age of seven, and worked regularly as a miner until he was twenty-four. In his later years he has had a varied career as a labor and socialistic propagandist, member of Parliament, and contributor to several papers and magazines of Great Britain. He is now chairman of the Socialist-Labor party in the Imperial House. He has been successful along his chosen path. Is he using his undoubted strength to further the best interests of the whole people? Or is he a prejudiced partizan aiming at the augmentation of the strength of a class, irrespective of its effect on other classes of the community? Mr. Hardie sets out his platform as a demand for sufficient food for the child, work for the able-bodied man and comfort for the aged. This is, of course, a platform about which no one will fight. Liberals and Conservatives, Lords and Commons, will fall into line in support of this. All recognize its desirability. But how? That is the question. Is it by a socialistic division of wealth without respect to the intelligence or industry of the individual, or is it by supplying the opportunity, which will be grasped in varying degrees according to the ability and enterprise of the individual?

It is worthy of note that Socialism has gained small headway in Canada. Here men, on the whole, are too busy to take up new and strange theories, much less to spend time in their propagation. The workingman is getting good wages, increasing more rapidly by far than the cost of living. The iron law of wages, which is the socialist's bugbear, has a complete disproval in existing conditions. Where thrift is practised, workmen not only get the necessities of life, but many of the luxuries, with some savings to boot. Wherever the unions will permit it a man earns and receives in accordance with his merit. A man of superior intelligence and industry will get more than an inferior man. As a consequence, in course of time he may lay by some money and become a capitalist and an employer of labor. This, unless socialism is grossly misunderstood, is not as it would be under communistic conditions. It is little to be wondered at that socialism has such small strength here when it is considered how eminently successful has been the present principle—rewards in proportion to work done.

The legislation in the Imperial House with which the Socialist-Labor party was most closely connected, does not redound to its credit. The weakness of any small minority is that it raises the welfare of its own, often petty, constituency above all other considerations. So in the present case the party, led by Mr. Hardie, successfully fought against having the funds of an incorporated union subject to seizure through a judgment against the union. There is no justice in such a claim. If an employer wrongs a union, the union has recourse by law, and may collect damages to the limit of his resources. If a union wrongs an employer there is no recourse. A judgment such as was recorded in the Taff-Vale case can no longer be given. The legislation establishing the present inviolability of the union funds was enacted through the pressure of the labor party. To that party must be attached the blame of a measure which is class legislation of the worst kind. Hence the simple programme set forth by Mr. Keir Hardie is rather a specious mask to a destructive legislative policy.

The Town of Carman, Manitoba

An Ideal Location for Manufacturers in Southern Manitoba.

THE largest and liveliest town in Southern Manitoba, about fifty miles from Winnipeg, the Chicago of Canada, is beautifully situated on the banks of the Boyne River, and well sheltered by groves of oak, elm, maple, basswood and poplar. It is the centre of a magnificent and fertile agricultural district in the far-famed Red River Valley, where crop failures are unknown. Over two million (2,000,000) bushels of wheat, besides oats and barley, are grown and marketed yearly in the district tributary to the town.

To the west of the town the soil is a black loam, with some timber, and to the north, east and south it is a black clay loam with a clay subsoil, a large percentage of which is still uncultivated. When brought under cultivation this will greatly increase the demand for all manufactured articles. Pembina Mountain wood, with the prospect of a coal find, insures abundance of cheap fuel. The recent discovery of an unlimited quantity of cement, equal to the best Portland, and the establishment of a pressed brick plant, with a capacity of 30,000 per day, eighteen miles west of the town, also insures a supply of cheap and good building material, while Davenport clay, graphite and gypsum have been discovered within a short distance of the town.



A View of Carman

Railroad Facilities.

Carman is exceptionally situated in regard to railroad accommodation, being the point of intersection of three lines of railways. The Canadian Pacific gives two trains daily each way between Carman and Elm Creek, at which point connection is made with the Winnipeg-Souris division of that road. The Winnipeg-Virden section of the Canadian Northern Railway passes through Carman with a daily express service each way. The newly constructed Midland branch of the Great Northern from Gretna to Portage La Prairie also passes through the town, and has inaugurated a tri-weekly service, which will in all probability, be increased to a daily service in the near future. These railways give ready access to all parts of the country, and afford excellent shipping facilities both as to passenger and to freight service, and should be an inducement to those who intend to locate in the West to look into the advantages offered by Carman as a business location.

Public Improvements.

Early in 1906 the Town Council decided to install a system of waterworks and sewers, thereby securing the most effective fire protection which it is possible for a town to have. A by-law was submitted to the ratepayers to raise the necessary funds, and was carried by an almost unanimous vote. At the same time a by-law authorizing the town to purchase the existing electric lighting plant was voted on and also carried. The work of installing the water-works and sewers was at once proceeded with, and by using the power of the electric light works the town is in a position to very materially reduce the cost of water-works and electric light systems. The water-works system adopted is gravity pressure, secured by a large elevated tank, and also by pumping direct into the mains when necessary to do so, as in case of a large fire. Cheap light, power and water are available at a reasonable cost, and effective fire protection will therefore, be guaranteed to any manufactory which may be established in the town. Carman is also well advanced in the direction of good streets and sidewalks, all principal streets being well supplied with good sidewalks from four to ten feet wide, and the streets are well graded and drained into the sewers.

All these improvements have been secured without incurring any undue taxation, as the payments for the water-works and electric lighting have been extended twenty and thirty years, respectively. The rate of taxation last year was under twenty mills on an assessment of about two-thirds of the actual value of the property. This levy covered all ordinary expenditure, as well as the support of the schools.

The town also owns thirty acres of public park, with athletic grounds and race track; the park portion being covered by large forest trees, makes it an ideal resort for picnics and promenades.

A Residential Town.

Carman occupies a place by itself amongst the towns of the West. Picturesquely situated, with the Boyne River winding its way through the heart of the town, the scene gaining an attractiveness from a veritable forest of trees, which not only surround the town on all sides, affording protection from storms and winds, but are also distributed in unbroken and continuous luxuriance in almost all the streets of the town. Compared with the treeless aspect of many of the towns of the West, Carman presents a scene which makes it difficult to realize that it is a Western town.

With its many beautiful residences, public buildings, wind-

ing river and wealth of foliage, the views presented in this, the forest town of the West, cannot fail to evoke pleasure and create surprise.

From a social standpoint the town is all that could be desired—nearly all the fraternal societies are here represented, and mostly all have large memberships, and are in flourishing condition. Six religious denominations are represented, and all have beautiful and substantial churches.

The educational advantages of the town have been well looked after. In this respect Carman stands second to none in the province, the cities not excepted. The town possesses an eight-roomed school building, with a staff of eight teachers. In the higher grades, second and third class and matriculation courses, are taught. The building is constructed on the most approved methods as to lighting, heating and ventilation. Besides the class rooms, there is a large assembly hall, with a seating capacity for 600 persons. In the basement are play rooms for the younger children, to be used in inclement weather. The school is equipped with a fine library and a physical science laboratory. The standing and percentage of the pupils who pass the departmental examinations each year are amongst the highest in the province, and attest the excellent capabilities of the teaching staff.

The town has also a well-equipped general hospital, with an efficient staff of nurses and an experienced medical faculty. This was opened three years ago, but its success in the treatment of medical and surgical cases has popularized it to such an extent that a movement is under way to double its capacity by building an annex this summer.

The town is at present well supplied with all branches of mercantile enterprise, and is looking forward to becoming a prominent manufacturing centre. Its location, railway facilities, public improvements, cheap sites for factories and homes for employes are advantages unsurpassed, or even equalled, by any other town in the West, and fit it pre-eminently as a centre for manufacturing enterprises.

Three chartered banks have branches located here. Two flour mills, with a united capacity of 150 barrels daily, have an established business. There are also two fine hotels, with the most modern conveniences for the accommodation of the public. Last, but not least, are two live local newspapers, with well-equipped jobbing departments.

Manufacturers seeking locations in Western Canada cannot do better than correspond with the Carman Board of Trade.

Personal inspection of the town is especially invited, as its advantages, once seen, will be sure to commend it to investors.



Residential Section of Carman

MARKET FOR CANADIAN IMPLEMENTS.

Discussing the possibilities for the sale of farm implements in Japan, Mr. A. MacLean says :

"For the present, farm machinery may be left over for consideration by, say, our successors—that is a wide enough limit. But there should be some farm implements, amongst those made in Canada, or patterned after them, that could be used to advantage, if the people here concerned were persuaded. The American grain-cutting 'cradle,' when offered for the cutting of crops that for ages had been reaped with the sickle, got a discouraging reception. The advantage was obvious from one point of view ; but those whose labor was to be saved would see only disadvantage, and they would have none of it. It may be safely assumed that the Japanese, whose labor is the better part, or, perhaps, the whole of his capital, is human enough to resist the use of an article that may seem to threaten to deprive him of the present means of living.

"But of the minor farm implements, it would appear that there might be some introduction, if the venture were well considered. It would strike the stranger, say from Canada, that the plough might be introduced—that is, a one-horse plough—steel mould-board and share-point, with wood beam and handles, suited for the turning of what is literally garden soil. This would serve to displace the hoe, which is not the garden or potato hoe, that has much to its credit in Canada and elsewhere, but an entirely different article, that is driven into the ground and pulled forward, and thus takes out and turns over its bite of soil. The plough I have indicated could be used in the small divisions of land allotted to the several crops, other than rice, and evidently would save an immense amount of manual labor applied to the raising of grain and vegetables.

"The grain crop of whatever kind in Japan is usually 'planted' in rows. It may be supposed that a seed-drill might be contrived that would sow the seed more evenly and economically than by the hand process."

Mr. James Crombie, foreman boiler-maker of the Sawyer & Massey Company, Hamilton, won first prize at the recent Boiler-Makers' Convention, for his article on "How to Heat and Drive Steel Rivets." The work of Mr. Crombie is most creditable, as he was in competition with the strongest men of his trade on the continent. The article was printed in full in the June issue of the *Boiler-maker*, of Pittsburgh, Pa.

International Rate Case

An Important Ruling in Transportation Case

THE so-called International Rate Case has at last been disposed of. The Board of Railway Commissioners issued an order on July 6th, in the matter of the application of the Canadian Manufacturers' Association and the shippers who were heard and represented at the hearings held by the Board in Windsor and Chatham, Ont., in the month of May, 1906.

On July 4th, 1906, the Secretary of the Board wrote the Railways, reciting the nature of the complaints with respect to international rates. This statement concluded as follows:

"The Board recognizes that the conditions of this traffic are affected by the existence of Companies in the United States independent of those operating in Canada, and by the operation of the corresponding clause (the long and short haul) in the Statute Law of the United States, and that the harmonizing of interests in making the changes necessary to apply the rule to traffic originating in the United States destined for points in Canada is a work of difficulty, and it thinks the Canadian Railway Companies should be given an opportunity to lay a scheme before the Board for its consideration, after negotiating with companies operating in the United States; and for that purpose the Board will defer further consideration of this complaint for a period of ninety days."

It was clear that no attempt at harmonizing the rates would be satisfactory under two classifications, namely, the "Official," from Port Huron, Detroit and Buffalo, as in effect throughout the Northern States, east of Chicago and the Mississippi, and the Canadian classification, from Sarnia, Windsor and Fort Erie, as in effect throughout the Dominion. One or the other would have to be adopted.

Meetings of the officials of the Canadian and United States Railway Companies were held, with the result that the United States Companies consented to adopt the Canadian classification and the Canadian tariff basis for their international traffic.

The tariff bases, as well as the classification, are different on the two sides of the frontier. The Canadian tariffs are built up on the 5th class, the 4th class being 25 per cent., 3rd 50 per cent., 2nd 75 per cent., and the 1st 100 per cent. higher than the fifth.

There appears to be no such established basis in Central Freight Association territory. From Detroit the present proportions are as follows:

	1	2	3	4	5
To Toronto	260%	210%	130%	60%	30%
Montreal	200%	159%	105%	41%	20%

An examination of the percentage tariff bases given above will show that if the rates from United States points were to be scaled up from 5th class, as is done in Canada, a great reduction in the International joint rates would result. Thus, Detroit to Toronto, instead of running from 5th, 13c., to 1st, 36 cents, as at present, would run from 13 to 26 cents; from Detroit to Montreal it would be from 23 1-2, 5th, to 47, 1st, instead of from 23 1-2 to 58 1-2, as now; and similarly with all points in the States west to the Mississippi; and this would be an impossible adjustment from the standpoint of the United States Railways. The alternative was to accept the present 1st class rates and scale down; and so far as Port Huron, Detroit and Buffalo are concerned, this is what has finally been done.

Draft Scheme Presented.

The Companies' draft scheme of the proposed revision of rates was presented to the Board on November 8th, 1906. It was then arranged that the scheme should be examined by the Manager of the Transportation Department of the Manufacturers' Association and by the Chief Traffic Officer of the Board. A meeting was held with the Advisory Committee of the Companies on December 19th. At this meeting the representative of the Canadian Manufacturers' Association considered the basis as a whole unsatisfactory. It was finally agreed that new trial tables should be prepared, which was done. In submitting these the Railways stated that they had endeavored to evolve a plan which would conform to the recommendation of the Board, that whatever scheme of adjustments was finally adopted should take care of the Toronto Board of Trade complaint as well as that of the Manufacturers.

They also pointed out that the elaboration of the bases suggested at the Montreal Conference, December 19th, 1906, had proved the impossibility of their voluntary adoption by the Companies. The results would prove so disastrous that the officials of the Grand Trunk and Canadian Pacific Railways felt that they could not assume the responsibility for the loss of such a large amount of net revenue. Hence they could not agree to make the reduction which would follow the adoption of the suggested figures. At the same time, they fully recognized the authority of the Board's orders, but in that case the Board, of course, would have to assume the responsibility of the results.

The scheme was most elaborate, and apparently involved a loss of revenue on the part of the Grand Trunk of from half a million to a million and three-quarters annually. The Canadian Pacific loss would equal two-thirds that amount.

Although it was conceded that these figures merely represented approximations (there had been no time for an audit), it was felt in justice to the railway companies that the Board could not ignore these statistics. It was also manifest that the verification of the results by an expert investigation of the Companies' books would consume so much time that the decision of the Board would have to be indefinitely postponed. It was therefore suggested to the Canadian Manufacturers' Association, and agreed upon, to accept tentatively an adjustment, and a resolution was passed to that effect and forwarded to the Board on March 25th last. It was set forth in the resolution that in petitioning the Board it would be understood that the new rates would be considered experimental and without prejudice to the right of interested manufacturers or the Association to appeal against the new rates so proposed, or against the higher rates which then prevailed on east-bound traffic over those charged on west-bound traffic, and not in any way to prejudice any complaints such as that of the Toronto Board of Trade or of this Association or of any of its members, now pending or to be submitted to the Board for ruling.

Manufacturers' Case Settled.

This resulted in other tables being drawn up by the Companies, having for their object the satisfactory solution of the two cases combined, viz., the Manufacturers' and the Toronto Board of Trade's. These proved impracticable. It became apparent that the Manufacturers' case would have to be settled on its own merits and on the basis outlined in our communication to the Board. It was also apparent that the revision of the general mileage basis, which would be a factor in the case, would have a direct bearing on the discrepancies between the local tariffs of which the Toronto Board of Trade complained, and the order was issued accordingly. As a

result of the order a general reduction has been made at such points as London, Brantford, Chatham, St. Catharines, Hamilton, etc. It remedies the long outstanding complaint that the railways discriminate in favor of through traffic from the United States to Eastern Canadian points as compared with traffic originating on the Canadian side of the boundary.

There is a marked reduction in freight rates from practically all points in Western Ontario.

The Board has ordered that the special local class tariffs (known as town tariffs) of the Grand Trunk, the Canadian Pacific, the Michigan Central, the Pere Marquette, the Wabash, the Toronto, Hamilton and Buffalo, and the Canadian Northern Ontario Railways, east of the Detroit and St. Clair Rivers, Lake Huron and the Georgian Bay (east and south bound), and south of the Ottawa River be reduced so as to place them all on the same mileage scale.

The rates shall in all cases be based on the shortest workable mileage.

That for the purpose of compiling special tariffs from points west of Toronto to points east thereof, the territory be divided into groups.

That from points competitive with the lake and river lines the Companies may publish such commodity rates as may be necessary to meet the competition of the water carriers, etc.

That no special commodity rates now existing which may be lower than the corresponding class tariffs herein prescribed shall be advanced by reason of the changes herein ordered, or without the sanction of the Board.

That in the adjustment of the international rates, the rates on raw material from points in the United States to points in Canada shall not be advanced at the instance, direct or indirect, of the companies operating in Canada.

That no change shall be made in the west-bound rates from Montreal.

That the Railway Companies and their connections in the United States be permitted to substitute the Canadian freight classification for the Official from Detroit and Port Huron and points west thereof *via* the Detroit and St. Clair River crossings, etc.

The New Schedules.

From this territory the present and proposed 1st class rates to Montreal are as follows:

From	Present Winter.	Present Summer.	Proposed Winter & Summer
Windsor, Chatham, Newburg, Sarnia, etc.	70	60	58
Strathroy	68	60	56
Glencoe, Komoka, Park Hill	68	58	56
London, St. Thomas, St. Mary's	66	56	54
Woodstock, Ingersoll, Tillsonburg, Stratford, Simcoe	64	56	52
Berlin, Galt, Paris, Brantford	60	50	50
Guelph	58	50	48
Hamilton	54	42	winter 46 / summer 42
Toronto	50	40	winter 44 / summer 40
Goderich	68	60	56
Collingwood	68	60	56
Mount Forest, Harriston, Palmerston	68	60	52
Orangeville	64	64	48

The territory between Toronto and Montreal has been regrouped. The following are examples of present and proposed rates from Windsor:

To	Present.	Proposed.
Whitby, Oshawa	44	40
Port Hope, Cobourg	46	42
Trenton, Belleville	48	44
Napanee	54	46
Kingston	54	48
Brockville	60	50
Prescott	60	52
Cornwall	66	54
Collingwood	50	42
Orillia	50	42
Quebec	84	70
Halifax	92	78
Sydney	1.00	86

The same scale will be used in revising the tariffs at the other common and distributing points.

From stations east of Toronto, from what is known as the Midland Division to Montreal, the straight mileage scale as adopted by the Board will apply.

The following is a comparison of present and proposed 1st class rates between other points:

	Present.	Proposed.
Chatham to—		
Guelph	36	32
Toronto	38	36
Kingston	54	50
London to—		
Hamilton	30	26
Toronto	36	32
Collingwood	38	34
Hamilton to—		
Toronto	22	18
Berlin	24	22
Woodstock	22	20
Palmerston	30	28
St. Thomas	30	26
Clinton	32	28
North Bay	46	40
Toronto to—		
Berlin	24	20
Guelph	24	20
Brantford	28	22
Woodstock	30	28
Stratford	30	28
Ingersoll	32	28
Penetang	34	30
Gravenhurst	34	32
Goderich	36	32
Southampton	38	34
Windsor	40	36
North Bay	46	38

The tariff applies both ways, and a higher rate cannot be charged to an intermediate point.

The railways are now busily engaged in the preparation of new tariffs for submission for the approval of the Board in accordance with the order.

A REVISED CLASSIFICATION.

The Board of Railway Commissioners have issued an order approving Canadian Freight Classification No. 13, to become effective not later than September 1st next. This classification will supersede all previous classifications and amendments thereto. The classification at present in use has been in effect since 1903. Various amendments have been made to it since that date, as a result of conferences with the railways and representation to the Board of Commissioners.

These amendments represent reductions in ratings, revised rules with regard to minimum weights for long cars in excess of the standard, mixed carloads, minimum charge for single articles too long for box cars, and requiring platform cars for carriage, a complete revised scale of minimum weights for freight loaded in cars in excess of the standard length; all of which necessitated various supplements.

Objection was taken to the "owner's risk" conditions of the present classification, as covered by rule 7 of the special regulations and conditions as follows :

Articles marked at O.R. must be so receipted for by agents, and the words "owner's risk" written in full on the shipping notes and receipts.

Articles marked "released" must also be so receipted for, and shippers or owners must duly execute a release in duplicate on the company's forms.

These conditions practically meant release from damage from any cause whatsoever. The carriers are relieved from liability even through negligence.

Representations were made urging strongly the elimination of the "owner's risk" condition altogether, and as a result of negotiations entered into between the Railway Commission, representatives of the Association and the railways it has been taken out as against some two hundred and forty items. Where it is retained the risk is specified and restricted.

Rule 7, as amended in the new classification, is as follows:

Articles at Owner's Risk—

Articles by the classification, shown as to be carried at owner's risk of weather (*i.e.*, O.R.W.), of breakage (*i.e.*, O.R.B.), or otherwise as the case may be, shall, unless otherwise required by the shipper, be carried at Owner's Risk as so specified and defined, and no special notation to that effect shall be necessary on the bill of lading.

Should the shipper decline to ship at owner's risk, as specified and defined in this classification, any article shown as to be so carried, he may ship them subject to the terms and conditions of the bill of lading approved by the Board of Railway Commissioners, in which case twenty-five per cent. over and above the rates which would be payable if such articles were shipped at owner's risk, will be charged.

These conditions are intended to cover risks necessarily incidental to transportation, but no such limitation, expressed or otherwise, shall relieve the carrier from liability for any loss or damage which may result from any negligence or omission of the company, its agents or employees.

Wherever the owner's risk condition is left in the classification it is defined as follows :

O.R.B., Owner's Risk of Breakage.
O.R.C., Owner's Risk of Chafing.
O.R.D., Owner's Risk of Damage.
O.R. Det., Owner's Risk of Deterioration.
O.R.F., Owner's Risk of Fire.
O.R.L., Owner's Risk of Loss.
O.R. Lkge., Owner's Risk of Leakage.
O.R.S., Owner's Risk of Shifting.
O.R.W., Owner's Risk of Weather.

The present classification stipulates that if a shipper of goods, for which a rating is provided at "owner's risk," desires to have them sent at carrier's risk, he must pay an advance of 50 per cent. The amended rule reduces this charge to 25 per cent., making the increase about one class higher than the owner's risk classification.

The release which is at present exacted on shipments of furniture and similar commodities has been done away with.

The rule of the classification describing the minimum charge of "smalls" rate has been amended to read as follows :

"The minimum charge for any complete shipment of one or more classes between any two stations of one carrier will be 100 lbs. at first-class rate, but not less than 35 cents."

It is further ordered by the Board :

"That any person or company violating the provisions of section 400, sub-section 1, of the Railway Act, shall, in addition to the regular toll, be liable to pay to the company a further toll not exceeding fifty per centum of the regular charge."

The above clause refers to misrepresentation of freight with the view of obtaining transportation of such goods at less than the regular tolls then authorized and in force on the railway.

The new classification, whilst it does not fully meet with the requirements of the shipping public, is a vast improvement on the one now in effect, and a step in the right direction. The improved conditions of carriage authorized by the Board will be appreciated by the shipping public as a whole.

MARKING AND ADDRESSING PACKAGE FREIGHT.

The attention of shippers is directed to a circular of the Grand Trunk Railway System, *re* marking and addressing package freight, which we publish at the request of the representatives of the General Freight Department.

An observance of the directions contained therein will, no doubt, tend to minimize the number of claims classified as "stray freight."

To Agents, Shippers and Connecting Lines East of Detroit and St. Clair Rivers.

Marking and Addressing Package Freight.

The attention of all concerned is again directed to the necessity of fully marking all freight.

Each package or piece of less than carload freight forwarded all rail, also each package or piece of carload and less than carload freight forwarded rail and lake, must be plainly marked with the name and address of consignee, so as to insure prompt delivery even if separated from the waybill.

Marks on package or pieces, should be compared with bill of lading and correction, if necessary, made by the shipper or his representative. Old marks must be removed or effaced.

Tags should not be used when the nature of the goods will permit of the address being stencilled on packages or pieces. When impracticable to do this, some distinguishing mark or brand should be shown, and such mark or brand should also appear on bill of lading. Agents must show such mark or brand on the waybill, fully describing the goods. For example, in the case of a shipment of canned goods, the bill of lading (also the waybill) must show so many cases of tomatoes, so many cases of pears, so many cases of corn, etc., as well as the brand and the mark indicating the name of consignee and place of destination.

Waybills for less than carload traffic consigned to the larger cities, as, for instance, Montreal, Toronto, Hamilton, London, Buffalo, Detroit, Chicago, etc., must in all instances give in detail the full address of consignee, *i.e.*, number and name of street, as well as place of destination, in order that prompt delivery of such freight may be effected.

On traffic forwarded rail and lake, the waybill and bill of lading for carload freight, as well as for less than carload shipments, must show the number of packages or pieces, for instance,—if the shipment consists of vehicles, cutters or like freight, the waybill and bill of lading must, in detail, describe the nature of the shipment, *i.e.*, so many springs, so many shafts, so many bodies, etc., etc. Be careful that full information is given in all such instances.

The address on packages or pieces must correspond with that shown on bill of lading. For example, on a shipment to Toronto, the packages or pieces must be marked "Toronto," and not some other destination for which the goods may be ultimately intended. If packages or pieces are intended for redistribution beyond, a special designating mark may be used for the guidance of those attending to the redistribution, but only the destination given on bill of lading must be shown on the goods.

Frequently, in connection with rail and lake shipments, there is on the same boat more than one consignment for the same consignee, and in order to prevent such consignments becoming mixed, it will greatly facilitate the correct handling, if shippers will also show on packages their name or trade mark. Consignments can then be delivered complete and errors avoided.

Freight consigned to a destination of which there are two or more of the same name, must not be accepted, unless the name of the County and Province or State be given.

When freight is consigned to a destination not on the line of a railway, the shipper must be requested to state the name of the railway station at which the consignee will accept delivery; or if destination is reached by a water line, the name of the railway station at which delivery is to be made to such water line.

The proper marking and addressing of freight is in the interest of shipper, carrier and consignee, therefore agents must insist on these rules being observed.

Note and be governed accordingly.

J. E. Dalrymple,
General Freight Agent.

Rule 18 of the rules and conditions of carriage classification 13, recently approved by the Board of Railway Commissioners, to become effective not later than September 1st, 1907, provides as follows:

"Each package, bundle or piece of less than carload freight must be plainly marked with the information necessary to carry it to destination, and insure proper delivery. Old marks must be removed or effaced.

"All freight c.l. or l.c.l. for rail and lake transportation must be fully marked as above required.

"Freight consigned to a place of which there are two or more of the same name must not be accepted unless the name of the county and province or state be given.

"When freight is consigned to a place not located on the line of a railway the bill of lading must state the name of the railway station at which the consignee will accept delivery, or if destined to a place reached by a water line the name of the railway station at which delivery is to be made to such water line."

The circular sets forth in a clear and comprehensive manner the rules as approved of by the Railway Commission. It will, no doubt, prove of value as a guide to shippers in respect to less than carload and lake and rail shipments.

UNIFORM BILL OF LADING.

An article in the July number of Industrial Canada, giving the present status of the proposed new bill of lading in Canada, stated that good progress was being made in the United States with the uniform bill of lading. Conditions have been agreed upon by a joint committee of shippers and carriers, representing substantially all of the railroads in what is known as official classification territory, and sixty different associations in the same territory, with a total of 800,000 members. At a conference held in Chicago on May 24th and 25th, 1907, these conditions were submitted to the Interstate Commerce Commission, with the view of having them incorporated in and form part of the Interstate Commerce Law.

In the new bill it is intended to hold the initial road and its connections liable for a shipment from the time it is delivered to the company until it is delivered to the consignee at its destination.

It is recommended that a draft of the bill of lading and conditions be submitted to the railways and commercial interests of the country early in July.

Freight, commenting on the new bill, says, in part: "It has required substantially two years to bring about this agreement. It is claimed, however, that the proposed document will not receive the approval of those carriers who were not directly a party to the agreement, or those shippers whose lines of business were not represented by the shippers who held membership in the committee. Some carriers are quarrelling with the railway representatives upon the Committee claiming the latter have given away their birthright. Shippers are objecting that the conditions are neither fair or equitable, and that the proposed document is little, if any, improvement upon the one now in use. It is, however, agreed that it is an improvement on the bill of lading proposed in December, 1903.

"So far the interested parties have been unable to agree as to what are and ought to be the rights, duties and liabilities of the several parties. The most important of these propositions is what shall be the liability of the carrier? Shall the shipper be justified in assuming that when he gives his property to the common carrier it will be delivered in specie, or he will be paid therefor?

"Such was the earlier law, even for connecting carriers, and there is good ground for insisting that such ought, at the present time, to be the foundation whereon a bill of lading should be framed."

It is to be observed that whilst the joint committee in the United States has been over two years at work on this agreement, and the same has been submitted for approval, that there is likely to be serious objections raised to the conditions as agreed upon. In fact objections have been taken and apparently will be taken to the first clause of the new bill. This will, no doubt, cause further delay. We are of the opinion that if shippers or carriers will continue to seek to introduce all sorts of conditions to form part of the receipt or contract to carry, just so long will there be a lack of uniformity of opinion as to what are the rights, duties and liabilities of the several parties.

The contention of the Canadian Manufacturers' Association is for a form of bill of lading without any conditions, simply an acknowledgment that the carrier has received the goods for transportation.

The Canadian Railway Act requires the companies to carry all traffic. They are insurers of the goods, and in case the same are injured, lost or destroyed whilst in transit should pay therefor. Why, therefore, should it be permitted to surround the receipt, which the carrier gives the shipper for his goods, with all sorts of conditions limiting his liability? The carrier is paid for the service, which he performs in accordance with the legal tolls, and thereby contracts to deliver the goods in the same conditions as he receives them. What further is necessary?

Considerable increases will be made in the rolling stock of the Intercolonial Railway during the present summer. Orders have been given by the Department of Railways and Canals for 400 box cars of 80,000 pounds each; 310 platform cars of 80,000 pounds each; 400 box cars of 60,000 pounds each; and 225 refrigerator cars. About thirty new locomotives will also be built in Kingston and Montreal for the I. C. R.

New Chairmen of Branches

MR. ED. J. FREYSENG.

In electing Mr. Ed. J. Freyseng, of the Freyseng Cork Co., Limited, their chairman for the year 1907-08, the members of the Toronto Branch, are honoring one whose zealous activity in the past in all Association matters is well known. Mr. Freyseng has occupied various positions of importance in the Branch administration since he became a member, and although he has suffered the inevitable penalty of willingness to serve his fellow-members by being placed on committees too numerous to mention, his record in attendance is equalled by few and surpassed by none. His tireless energy seems inexhaustible, for the more work he has to do the better he does it. In him the Branch will find an efficient, painstaking officer, willing to sacrifice his time whenever his position demands it.

Mr. Freyseng has lived in Toronto all his life, and now bears on his shoulders the full responsibility of the management of the Freyseng Cork Co., Limited, of which he is vice-president and managing director. This company, founded by his father, Mr. Peter Freyseng, of Toronto over thirty-one years ago, now has branches in all the large cities of Canada. The success of the undertaking needs no comment, and simply bears out Mr. Ed. Freyseng's characteristic policy, "Keep-going."

The new chairman is also prominent in other city business organizations, being on the Executive of the Riverdale Business Men's Association, and on several committees of the Board of Trade. He is identified with several social and fraternal organizations in the city, in which he has held high offices, and among the citizens of Toronto his friends are legion. Mr. Freyseng is still a young man, capable of rendering great services in the future to the community to which he belongs, in addition to those he will undoubtedly render to the Canadian Manufacturers' Association.

MR. S. W. EWING.

Mr. S. W. Ewing, the newly elected Chairman of the Montreal Branch of the Canadian Manufacturers' Association, is a son of Mr. S. H. Ewing, President of the Montreal Cotton Company, and one of Montreal's best known business men.

He was born in Montreal, and educated at the Montreal High School. Entering business life, he was for thirteen years in the employ of Gault Bros. & Co., wholesale dry goods. Later he went into the coffee and spice business, and secured an interest in the firm of Bourgeon & Herron, which, in time, became the now prominent establishment of S. H. Ewing & Sons. The progress made by the new business was very extensive, and in June, 1906, it was further enlarged by the purchase of the firm of S. H. & A. S. Ewing.

Mr. Ewing has taken a deep interest in many things outside his own line of business. He is a past president of the Junior Conservative Club, Chairman of the Montreal Philharmonic Society, and Vice-Chairman of the Dominion College of Music. He is a life member of the St. George's Club, and a member of the M. A. A. A., Royal St. Lawrence Yacht Club, Montreal Board of Trade, and the Albany Club, Toronto. He is also a prominent Mason.

Mr. Ewing has brought his keen business ability to the service of the Canadian Manufacturers' Association. There are many calls on the time of an active member, but the new chairman has always been ready to do the work in hand. During the last year he has been Vice-Chairman of the Montreal Branch, and he is a frequent attendant at the monthly meetings of the Executive Council. The Montreal Branch is assured of an active year of progressive work, which, indeed, has been characteristic of the Branch for a considerable time.

The number of questions which come up for settlement in a big city like Montreal is steadily on the increase. It is well to have Mr. Ewing representing the manufacturing interests.



Mr. Ed. J. Freyseng



Mr. S. W. Ewing

OUR NEW ZEALAND LETTER.

WELLINGTON, N.Z., July 1st, 1907.

I promised in my last letter some particulars about the trade possibilities between New Zealand and Canada. To plunge into the subject straight away, I can honestly say that Canada never had a better chance to open up trade with New Zealand, and get a share of the business, which still goes to the United States.

Everything being equal, New Zealand is eager to buy from Canada. The Government is doing everything to bring about a closer connection. A tariff revision, which will, no doubt, shower more favors on Canada, will be tackled during the next session.

The New Zealand Premier, Sir Joseph Ward, made some very practical suggestions at the Premiers' Conference in London, for a closer union, particularly between Canada and New Zealand, and as Sir Wilfrid Laurier is sympathetic, there is every prospect of a development, which can only benefit Canadian industries.

But are the Canadian manufacturers prepared for an export trade ? And do they realize the importance of it, and the obligations which it puts on their shoulders ?

Judging by past experiences I fear many are not.

When catering for an export trade three things must be strictly observed, otherwise all attempts will prove futile :

Prompt and regular deliveries.

Quality up to sample and description.

Economical, at the same time suitable, packing.

In all three essentials mentioned the majority of Canadian manufacturers have been singularly wanting. Deliveries have been at pleasure. I have seen orders twelve months old, and not even an excuse tendered for their non-execution. What this means to the merchants here can be hardly conceived by the offenders, otherwise they would strain every nerve to get their export orders away. How would these people feel with contracts in hand and no shipments in sight, and 10,000 miles away from the nearest source of supply ? Many a merchant here deplores the day when he first diverted his orders to Canada. He did so, not because Canada held out any special inducement, but simply out of sentiment, and this is the way he has been treated.

If a manufacturer wants to cater for export trade, the first question he has to put to himself is, " Am I in a position to take care of such orders, and can I execute them regularly and promptly ?" Only, then, when he can conscientiously answer in the affirmative has he a right to go after it.

The question of quality and honest workmanship is another serious thing. The manufacturer who thinks that he can send anything abroad, which he would not dare to offer his home customer, will be bitterly disappointed. Customers here are willing to pay a fair price, but they expect value for their money.

The third, and also a very material point, is the packing for export. Most of the Canadian manufacturers are in blissful ignorance of a serviceable, and, at the same time, economical, packing of their wares. The manufacturers have to bear in mind that shipments for New Zealand have to travel by direct route, at the least, 10,000 miles, and via New York more than 14,000 miles, with one or more transhipments thrown in. The handling of cargo at the port of transhipment is, as a rule, very rough ; cases and bales are dumped down on the wharves, taken up by trucks and slung on board the ocean steamer with very little consideration. Once on board the trouble does not end. If the steamer strikes bad weather, the constant movement breaks up bad cases and boxes, or damages the contents through squeezing them into all sorts of shapes.

Even in fine weather the ship's movement is considerable, and much more destructive to packages than when they are travelling on a train. The writer has seen expensive goods packed in such a risky way that it would not be considered safe here to send them fifty miles by rail.

Things would not be half so bad if the damage done affected only the guilty manufacturer ; he would soon get the cold shoulder and drop out of the running. The worst of it is, that the deeds of a few reflect on the whole country, and if there is no change for the better, Canada will soon be played out in this market.

Another great drawback is that there is no direct connection between Canada and Australasia from the East Coast. This is not the fault of the manufacturer, but of the Government. As long as New York monopolizes the shipping business of Canada to Australasia this business cannot develop satisfactorily. Canada in this respect is under bondage to the United States, which is a very discreditable position to be in, for a country of Canada's industrial importance. A country which can afford it (and who to-day will say that Canada cannot) ought to do her own carrying. New Zealand, though ever so much smaller in territory, with only one-eighth of the population, maintains for her carrying trade, coastal and abroad, a fleet of steamers, which pro capita is about the largest in the world.

The United States are actually our only rivals in the Australasian trade, and still we entrust them with the carrying of our merchandise, give them a full insight into our business, and even employ them to sell our goods. Just think of it as an ordinary business proposition. Would any manufacturer give his carrying trade to his strongest competitor ? Would he give his competitors a list of his customers, and show them what class of goods he is shipping to them? Or would he make use of the same agents as his competitors are employing to sell his goods ? No fear ! He would ridicule the idea. But that is exactly what Canada is doing by allowing the United States to do her carrying trade. Canada must have a direct connection from the East Coast with Australasia, and as long as the connection is not established she will always be at a disadvantage against her more powerful and industrially stronger neighbor.

I can prove that some Canadian manufacturers, by doing their business through New York, gradually lost the trade, as the New York firms have not the slightest interest in helping Canadian industries along. As soon as they have got hold of full information they try to find the same, or similar, goods in their own country, and one can't blame them. Much of the above will be unpleasant reading, and may not quite tally with the high opinion some manufacturers have of themselves, but I have only said what I know to be positively true, and if Canada wants to hold and increase her trade with New Zealand many things will have to be altered, and if this letter will, in any way, assist to bring this about I shall be sincerely glad.

In conclusion, and to show how perniciously the neglect of some firms acts against the best interests of the country, I will relate here one instance, without mentioning names or the article involved:

A certain commodity is benefited by the preferential duty. The Government of New Zealand has made it compulsory that the article in question must be of British manufacture when used for Government work. As this line is not made in Great Britain, merchants are compelled to buy from Canada. Now it happens that deliveries are so neglected that the market is entirely bare, and, no doubt, if no improvement takes place, contractors will explain the position to the Government, who will be obliged to rescind the preference.

Is it not time to awaken ?

I could relate a good deal more to the same effect. Many of your readers may think that I overdraw ; in fact, I have not done so. I could tell worse, and back up my assertions with documentary evidence.

Summing up the position I would say :

Don't cater for export trade if you cannot promise *prompt* and *regular* deliveries, or

If you are *inexperienced* with regard to packing your goods for export, or

If your lines *cannot stand* the long journey passing through various climates. This particularly applies to furniture.

Get rid of the New York bondage, do your own carrying, and do your business through your own people, and not through foreigners, who have no interest in your industries, and only make use of you when they cannot get the same lines in their own country. Would England be so powerful to-day if she had left the carrying of her manufactures to outsiders ? Why is Germany so anxious to get a strong footing in the carrying trade ? Because it is an economical and political factor in a country's industrial life, which cannot be neglected.

A country which is not able to handle her own carrying is always in a state of dependency, a position which cannot be satisfactory to any virile and self-respecting country.

COSMOPOLITAN.

FOREIGN TRADE NOTES.

Reductions in Tariff.

Manufacturers of structural steel and Portland cement will be interested in a recent report of the Canadian Commercial Agent in Jamaica on these items. He reports as follows :

At a meeting of the Legislative Council of the colony, held on 18th instant, an amendment to the present tariff law was introduced, which involved the placing on the free list of Portland cement, and also the necessary equipments for the erection of steel buildings.

The latter, previous to the passing of the law, were subject to an import duty of 16 2-3 per cent. *ad valorem* on first cost. Cement was rated at 2 per cent. per barrel of 400 pounds.

The Loss in Leaky Boiler Settings.

A notable case of saving fuel by stopping the air leaks in boiler settings has been made in the Stratford Hotel, Chicago, the mechanical plant of which, together with that of the Railway Exchange Building, Chicago, is in charge of F. J. Saxe. The boiler setting in this case was covered with a layer of asbestos cement over which canvas was pasted, and the whole covered with a coat of heavy paint. The saving as a result of this change is stated to be about $100 a month, or 12½ per cent. of the monthly coal bill. The boiler is run twenty-four hours per day in lighting service. Mr. Saxe says that simply coating the brickwork thoroughly with red paint so as to fill the pores, will cause a marked saving of fuel in almost any boiler.—*Electrical World.*

Interior Freights.

In the matter of the addition of interior freights to the value of goods for duty in Australia, there seems to be some doubt in the minds of Canadian exporters. The broad principle in the levying of duty on Canadian goods, is that interior freight must be added to the value of the goods as exported from Canada to the nearest port of export. In the case of shipments from Nova Scotia, where they are sent by rail, for example, from Truro to Halifax, and thence to Halifax to New York, where they are transferred to an ocean-going ship, duty would be paid, not on the freight to New York, but only to Halifax, notwithstanding that the transhipment takes place at New York.

In the case of Canadian ports, like Brockville and Sault Ste. Marie, situated on neutral rivers, no freight need be added at any time, as they are ports of export. Again, in the case of Toronto, where shipments can be made by boat to United States points, in the summer time no interior freight need be added, as Toronto in such case is a port of export, and Lake Ontario is a neutral water. When the exports are made after the close of navigation, the proportion of rail freight to New York paid to Niagara Falls would have to be added to the cost of the goods, as interior freight. If goods from an interior point are shipped to Australia and might be shipped via Toronto and hence to Rochester or some other United States point, there would need be added to the invoice, the freight paid to Toronto in the summer season. The same rule would apply to Hamilton and ports on the great lakes or the rivers, where they are boundary lines.

Descriptions Necessary.

In Australia the Commerce Act demands that a trade description must accompanying all imports of boots and shoes, setting forth the principal material from which they are made. The following statements will show to what extent this description must go : "Unless the soles are of solid leather, the description must state the fact, and the nature of the admixture or addition. Numerous inquiries have reached the customs authorities as to whether the word 'soles' refers to both the inner and the outer soles, and also whether the presence of a small piece of waterproof felt or other similar substance inserted between the inner and outer soles to prevent water penetrating to the inner sole must be disclosed in the trade description. It has now been decided that the word 'soles' includes the inner and outer soles, but not the thin slip of paper or similar substance which is affixed inside the boot to the surface of the inner sole. It is further announced that the presence of the waterproof felt or other similar substance as mentioned must be indicated in the trade description."

Elevators for South Africa.

Of all the transformations South Africa has witnessed during the last ten years, none has been more complete than that in architecture. Instead of the insignificant structures which were accounted sufficient for a less progressive age, there have sprung up palatial Government, municipal, and commercial edifices, which would do credit to the most up-to-date cities of Europe and America. In some respects South Africa is actually more up-to-date than the United Kingdom, as, for instance, in its adoption of that type of mercantile architecture evolved in the New World, and known as the "sky-scraper." These towering masses of steel and stone are especially to the fore in Capetown and Johannesburg, but are also to be found in almost every other town of importance in the sub-continent.

That the erection of these buildings creates an enormous demand for material, such as steel, foreign to the architecture of the previous generation, is well known ; but it is also true that the altitude to which they are carried—frequently eight or ten storeys—necessitates the utilization of other modern inventions, such as lifts and elevators for both passengers and goods ; and it is, therefore, not surprising that a considerable market has been created for such appliances. Whereas, however, in the United Kingdom the hydraulic lift has a wide vogue, in South Africa, where in many places the scarcity of water presents difficulties, the electric elevator is more favored, in spite of the difficulty hitherto experienced in finding local mechanics capable of erecting and repairing these appliances—a difficulty, however, which is being rapidly overcome. Of course, there is, and there is likely to continue, a demand for hydraulic lifts, but it is improbable that it will attain the proportion of that for the electric variety for the reason stated, and also because of the general popularity of everything electrical in South Africa.

"Manufacturers' Mutual" Fire Insurance

IN the course of the canvass of the members of the Canadian Manufacturers' Association now being undertaken in the interest of the two Mutual Fire Insurance Companies, it has become apparent that the actual facts concerning the history and record of the "New England Mutuals" are known to very few. Indeed, it is open to question if the members of the Insurance profession are generally any better posted.

In *Best's Insurance News* for July there appears an article on the subject which we think we shall be doing service to the members in reprinting *in extenso*. *Best's Insurance News* is devoted to the interests of the insured, and not of the Companies; it is regarded as a carefully edited and reliable journal devoted to the protection of Insurance buyers, and is generally conceded to be an authority on the subject on which it treats. It is published by the Alfred M. Best Company, Incorporated, New York, and we desire to express our indebtedness to them for the article and for the figures that follow:

Below we print two tables showing the financial condition and transactions of various mutual companies composing the senior and junior conferences of mill mutual insurance companies. Several of the companies are members of both the senior and junior conferences, and we have duplicated their figures in order that persons desiring information as to the relative standing and results secured by the companies in either conference, will find in compact form the statistics of all the companies in either group. These factory mutuals have shown considerable saving to their members. They write large lines upon sprinklered manufacturing risks, usually isolated plants, so that they are not subject to the conflagration hazard. All of the companies have been successful, and while there is always a possibility that a series of heavy losses may necessitate an assessment; but this possibility is very remote. Lines should be graded in proportion to the size of the companies, particularly in dealing with the "Junior Conference." The assessment liability assumed by the members of the various companies is five times the cash premium, except in the case of the Metal Workers, Narragansett and Textile Manufacturers' Mutual Fire Insurance Companies, whose members are liable for only three times the cash premium.

The secretary of the Manufacturers' Mutual and its five associates explains the system in the following letter:

"Providence, R. I., July 11, 1907.

"Alfred M. Best Co.,

"100 William St., New York, N. Y.

"Dear Sirs:

"Our method of doing business is somewhat as follows:

"We charge a certain rate and write our policies for a term of one year or less, making the expiration on the first day of a month. On the first of every month we deduct from the premiums received for the twelve months next preceding, the expenses and losses less the income from our investments,

SENIOR CONFERENCE.

NAME.	Commenced Business.	Cash Assets Dec. 31,1906.	Cash Surplus Dec. 31, 1906	Unearned Premiums Dec. 31, 190 6.	Premiums received during 1906.	Dividends paid during 1906.	Losses paid in 1906.	Average dividend (per cent.) during 1906.	Average dividend for last 5 years.
American Mutual, Providence, R.I.	1877	$379,369	$218.413	$154,912	$312,119	$249,491	$12,586	93.00	91.53
Arkwright Mutual, Boston, Mass.	1860	1,452,096	729,467	714,253	1,437,482	1,231,315	74,240	91.25	90.92
Blackstone Mutual, Providence, R.I.	1868	917,462	555,279	349,192	701,907	577,069	32,459	92 75	91.50
Boston Manufacturers, Boston, Mass.	1850	1,730,314	837,147	884,465	1,787,147	1,497,104	84,608	90.00	89.97
*Cotton and Woollen Manufacturers Mut., Boston.	1875	387,003	107,723	255,717	494,063	294,460	37,935	85.00	81.75
Enterprise Mutual, Providence, R.I	1874	362,763	201,683	155,033	312,089	349,696	12,586	93.00	91.41
Fall River Manufacturers Mutual, Mass.	1870	583,423	306,645	273,644	554,632	476,609	28,482	92.25	91.66
Firemen's Mutual, Providence, R.I.	1854	1,396,390	902,539	476,153	964,403	843,603	52,637	94.08	93.30
*Hope Mutual, Providedce, R.I.	1875	375,795	193,494	175,263	344.678	281,749	27,588	89.42	84.92
Manufacturer's Mutual, Providence, R.I.	1835	810,882	511,826	287,638	580,051	476,125	27,355	93.67	92.37
Mechanics Mutual, Providence, R.I	1871	510,621	308,174	194,638	392,306	311,194	16,984	90.00	90.00
Merchants Mutual, Providence, R.I	1874	405,880	301,459	177,818	357,973	294,684	15,304	93.92	92.43
Paper Mill Mutual, Boston, Mass.	1887	152,386	78,369	73,267	147,456	124,849	4,914	90.75	88.66
*Philadelphia Mfrs. Mutual, Philadelphia, Pa.		.....	.....	.....	.....	.....	.....	90.92	81.70
Rhode Island Mutual, Providence, R.I.	1848	1,049,664	654,262	380,522	767,414	635.041	40,906	93.50	92.53
*Rubber Manufacturers Mutual, Boston, Mass.	1885	396,560	141,188	231.917	460,082	364,802	37,430	85.00	81.08
State Mutual, Providence, R.I.	1855	1,330,583	736,674	572,666	1,156,028	968,144	57,847	92.83	91.78
*What Cheer Mutual, Providence	1874	394,104	197,137	188 465	376,618	311,687	22,349	89·25	85.58
Worcester Manufacturers Mutual, Mass.	1855	643,603	339,836	299,762	605,282	536,662	33,013	93.17	92.58

JUNIOR CONFERENCE.

Baltimore Mutual, Baltimore, Md	1886	$138,326	$ 55,971	$ 81,944	$156,660	$131,470	$16,887	88.33	74.75
*Cotton and Woollen Manufacturers Mutual. Mass.	1875	387,003	107,723	255,717	494.063	394,460	37,935	85.00	81.75
Cotton Mill Mutual, Augusta, Ga.	1903	19,933	6,319	12,113	24,227	18,225	8,191	68.75	‡70.94
Factory Mutual, Cleveland, Ohio	1903	30,841	5,054	21,564	42,682	26,414	11,083	67.08	‡67.38
*Hope Mutual, Providence, R.I.	1875	376,795	193,494	175 263	344,678	281,749	27,588	89.42	84.92
Industrial Mutual, Providence, R.I.	1890	273,976	94,223	164.471	331,327	232,997	25,868	75.00	77.50
Keystone Mutual, Providence, R.I.	1885	260,665	134,215	123,087	237,219	194,161	27,335	87.17	75.48
Manton Mutual, Philadelphia, Pa.	1894	206,533	103,715	100,260	192,221	147,989	24,672	87.17	75.40
Maryland Mutual, Baltimore, Md.	1902	44,384	12,707	31,581	57,755	46,244	9,910	80.42	‡80.94
Mercantile Mutual, Providence, R.I.	1884	247,009	124,249	114,355	228,349	185,349	25,832	85.42	76.57
Metal Workers Mutual, Providence	189	38,051	14,178	20,078	37,530	29 951	5,528	80.42	68.42
Mill Owners Mutual, Chicago, Ill.	1895	98,941	40,371	53,649	109,103	80,614	8,823	80.00	69.83
Narragansett Mutual, Providence, R.I.	1895	105.214	43,149	55,401	119,436	91,000	12,316	83.75	74.75
National Mutual, Philadelphia, Pa.	1902	62,673	29,304	32,529	59 804	44,679	7,299	82.50	‡ 5.83
Patapsco Mutual, Baltimore, Md.	1895	86,135	31,006	54,953	104.361	85,817	12,863	84.58	73.75
*Philadelphia Manufacturers Mutual, Phila. Pa.	1880	.....	.....	.....	.....	.....	.....	90.92	81.70
Protection Mutual, Chicago, Ill.	1887	191,481	101.667	82,605	167,606	135.022	18,421	88.75	72.54
*Rubber Manufacturers Mutual, Boston, Mass.	1885	59 ,560	141,188	231,917	460,082	364,802	37,430	85.00	81.08
Standard Mutual, Philadelphia, Pa.	1892	.....	.....	.....	.....	.....	.....	86.25	76.75
Textile Manufacturers Mutual, Providence, R.I.	1902	52,982	22.867	29,517	58.231	42,113	8,484	85.42	‡81.94
*What Cheer Mutual, Providence, R.I.	1874	394,104	197,137	188,465	376,618	311,687	32,349	89 25	85.58

* Members of both Senior and Junior Conferences. ‡ Average only for three and one-half years.

and pay back to the policyholder the balance at an even percentage. As, for example, if we should earn 95.18 per cent., we would pay 95 per cent.

"By placing the income from our investments to the credit of the policy holders we reduce the expense account to a very small figure. Speaking for the six companies in this office, you will see by the enclosed statement that the expenses and taxes incurred during the year 1906 aggregated about $193,000, but against this we credited the income from our investments of $161,000, so that out of the $3,520,000 received for premiums we retained only this difference of $32,000 and $147,000 for losses.

"In other words, the business handled for 1906, totalling over $470,000,000.00, was handled at an expense of 91-100 of 1 per cent. of the premiums received, and the losses.

"By this you will see that whatever profit is made by the insurance companies goes back into the pockets of the policyholders, for we retain nothing but the fraction of the per cent., which in reality amounts to but a few dollars each year. The middleman is entirely eliminated, as well as all the unnecessary and extraordinary expenses incident to other business of the same character.

"An item of interest in the nature of adjustments of losses is the satisfaction we have given, for the record of our Manufacturers' Company for seventy-two years (which is true of our other companies) is that we have never forced our policyholders to resort to the courts at law to get their just claims.

"As to the classes of risk, we confine ourselves wholly to manufacturing property fully protected. We were the first to recognize the value of automatic sprinklers, and their introduction has shown their great advantage in cutting down the losses, and the consequent increase in our dividends. For the last ten years the dividends of the six companies in this office have averaged better than 90 per cent., and for the last five years a fraction under 92 per cent.

"Another interesting feature about our underwriting is the fact that by confining ourselves wholly to manufacturing property, it generally means that our risks are located on the outskirts of towns and cities, and are, therefore, not subject to the conflagration hazard. We lost nothing at Chicago, Boston, Waterbury, Paterson, Baltimore, Rochester, Toronto, or San Francisco, and what is true of our companies is true of most of the mutuals."

AN ATTRACTIVE PROPOSITION.

The Secretary has just received a communication from a well-known London, England, manufacturers' agent, which outlines a proposition which should prove attractive to all Canadian manufacturers desiring a first-class man who can act as their wholesale distributing agent and representative in Great Britain. The party writing has a large warehouse right in the heart of London, where he keeps stocks of the goods he now handles for Canadian and American manufacturers. His large staff of travellers cover every part of England, and he is in touch with all the most important buyers in the country. All correspondence, billing, etc., is done on the manufacturers' own letter-heads; the representative receiving a commission for the business placed. His warehouse is the manufacturers' British headquarters. He is at present desirous of taking on a few good houses exporting wooden handles of all kinds, wheel-barrows, rakes, skewers, ice-cream freezers, bench screws (maple), clothes pegs, chair seats, pastry boards, closet seats. Will be in Canada in October. Further particulars at this office.

Another large saw-mill will be added to British Columbia's lumbering industries. Richard T. Godman, an English capitalist, has made considerable investments in the Pacific Province and will erect a mill near Point Atkinson.

BOOKS AND CATALOGUES.

The Canadian Annual Review.

The publication of a new volume of the Canadian Annual Review is always a matter of interest. The volume for 1906, which has just appeared, in every way meets the expectations of the reader. It is a most complete review of Canadian events, and it has the additional grace of being thoroughly indexed.

Mr. J. Castell Hopkins has shown a happy faculty in accumulating facts and sifting the grain from the chaff. The activities and interests of our country are so diverse that the individual can no longer pretend to keep in touch with them all. Yet the six hundred pages of the Review contain the salient features in brief, lucid and unprejudiced form, of all that has taken place in Canada during the twelve months it covers. Our material development and resources, our transportation problem, our political affairs, are all treated of adequately. Nor does the volume stop at these bigger problems. It will be found a storehouse of information on Canadian current events.

The catalogue of the Ideal Concrete Machinery Company, Limited, London, gives a complete illustration of concrete machinery and the concrete blocks which are made from it. The use of concrete for building purposes has increased immensely in recent years. The establishment of the Canadian factory of this United States company is a proof of that. The booklet before us shows cuts of blocks and pillars made by the Ideal machines, which are sufficient reason in themselves for the poularity of cement. The results seem to justify the popularity.

A catalogue of exceptional merit has been issued by the Metal Shingle and Siding Co., Limited, of Preston, Ont. The 188 pages which it contains, give ample scope to the illustrator, and he has used his space to advantage. Reproductions of innumerable styles of metal work are shown. This class of ceiling and siding has been advanced to a high state of artistic development. In the book, not only are cuts shown of the individual pieces, but many attractive interiors of stores, churches and other public buildings are given, giving convincing proof of the popularity of these goods.

The book and stationery house of Brown Brothers, Limited, Toronto, has completed fifty years of service, and the golden anniversary has been celebrated by the issuance of a booklet descriptive of the firm, its history and progress. The book is illustrated throughout with cuts of members of the firm, employees, and warehouse and factory scenes. It is well gotten up, and will prove of great interest to the many who have come to look on the firm as one of Toronto's permanent institutions.

The Ottawa *Free Press* has issued a special number to commemorate the fortieth anniversary of Confederation. It is a souvenir which all who are interested in Canada's capital will be glad to receive. The pictorial section, consisting of sixteen pages printed on heavy paper, contains much to arrest the attention. Through its connection with the Federal Government, Ottawa has become the centre of much that is of imperial calibre. The *Free Press* is to be congratulated on the wealth of historic matter it has gathered together in this excellent issue.

Among the Industries

The G. C. Hanford Mfg. Co., of Syracuse, N.Y., have opened a branch factory in Montreal to manufacture patent and veterinary medicines.

The Standard Chemical Co., of Toronto, have purchased a large block of land in Montreal, where it is understood they will erect a large plant.

A new factory will be erected at once by the Chestnut Canoe Co., Ltd., at a cost of $13,000. The building will be brick and three stories high.

A site has been selected for the new Wolverine Brass Factory, at Chatham. The contract for the building has been let and work will commence immediately.

It is reported that the Montreal Pipe Co., of Montreal, will establish a car-wheel manufacturing plant in Londonderry, U.S., during the present year.

The Dominion Pharmacal Company has been organized, under the presidency of H. W. Frick, to manufacture chemicals. The manufacturing will take place in Toronto.

The president and manager of the Alberta Biscuit Company of Calgary have decided to establish another factory in Edmonton. The company will be capitalized at $150,000.

The citizens of St. Thomas have passed a by-law bonusing a car-manufacturing company, which wants to establish a plant in that city. The company is being largely financed by local capital.

The Waterloo Knitting Mills will remove from Waterloo, Que., to Carleton Place, Ont., in September. The change is chiefly on account of the increased bonus they will get from Carleton Place.

A flour mill at Campbellford, owned by L. H. Stephens, was destroyed by fire during the month. The loss is estimated at about $11,000. The mill had just been equipped with $4,000 worth of new machinery.

A company was recently organized in Stratford, Ont., for the manufacture of snow ploughs. It is now proposed to extend the scope of the work and manufacture steel box and flat cars. A prospectus has been issued showing the possibilities in this direction. Robert Larmour, of Stratford, has been appointed general manager.

The C. P. R. have decided to construct fifty giant locomotives, exceeding in size any engine ever built in Canada heretofore, for use on the mountain division. They will have a drawbar pull of 40,000 pounds, whereas the greatest traction effort of present locomotives is 31,000 pounds, which will move a train load of nine hundred tons.

At Swanson Harbor, near Vancouver, B.C., a pulp and paper industry will be established, which promises to add greatly to the industrial activity of the Pacific Province. The Canadian Sulphite and Pulp Co., Ltd., have already begun building operations, and it is expected that the necessary plant will soon be in running order. A sawmill, pulp mill and paper mill are all included in the company's plans.

The St. Charles Condensing Company, of New York, are considering the establishment of a plant in Woodstock, Ont. It is understood that if the city will guarantee a sufficient supply of water and grant a free site the company will proceed at once with operations.

J. F. Shadforth, formerly of the iron-working firm of Shadforth, Ltd., is endeavoring to organize a company to establish blast furnaces on Vancouver Island. The plant in contemplation would require a capital of $2,000,000. With this Mr. Shadforth thinks that a most successful business could be developed. There is a big demand for iron and steel in the West, and requirements in the line of steel rails are great and increasing.

The proposition to establish a smelter in Toronto has been revived by Messrs. Mackenzie & Mann. Now that the Canadian Northern Ontario is completed to the north, it is recognized that such a smelter could be supplied with ore most advantageously. In case the proposal is carried out, car works and other industries, requiring in all $50,000,000 capital, will be established. A suitable location in Ashbridge's Bay district is available.

The Jeffrey Manufacturing Company, who have now got their Canadian factory in Guelph in running order, have issued a supplement, No. 57B., to their catalogue, giving numerous illustrations of their conveying machinery in actual operation. They show machinery of this kind for sawmills, lumber mills and wood-working industries. The catalogue is very complete, and will well repay a perusal. It can be had on application to the company at Guelph.

Sherbrooke, Quebec, is having plenty of activity in industrial circles at present. The E. & T. Fairbanks Co., scale manufacturers, of St. Johnsbury, Vt., have been voted a bonus and are to erect a large factory there. A new factory is in course of construction for W. R. Webster & Co., cigar manufacturers, and La Cie. J. L. Mathieu, patent medicines, are extending their plant. The Pearl Jewellery Co., a branch of an American concern, is also locating a large factory in Sherbrooke.

The Canadian Iron & Foundry Company, Ltd., whose head offices are at Montreal, is building a large pipe foundry at Fort William, Ontario. The plant is being constructed on a new plan, which provides for a system of continuous operation, and according to the number of hours run and the size of pipe cast. Besides the pipe works a large general foundry and car-wheel shop is being built, together with a machine-shop of corresponding capacity. The plant will be worked by electric current obtained from Kakabeka Falls.

The National Transcontinental Railway Commission has awarded contracts for 65,371 tons of steel rails and fastenings The "Soo" Company will receive over 22,000 tons for the Abitibi section, the first half to be delivered on November 1st, 1908, and the other half in 1909. The balance of the rails, over 43,000 tons, go to the Sydney company. The first half will require to be delivered in November, 1907, and the balance in July, 1908. Delivery will be at Edmonton, Quebec and Levis. The round figures of the cost of the orders will be about $1,850,000.

Situations Wanted

NOTE.—For further particulars regarding any applicant mentioned below, apply by number to the Secretary at Toronto, stating wages, whether work will be permanent, and giving such information as you think advisable. For all help secured through this medium, our regular Labor Department charges will be made.

Brass Workers.

1 **Fitter and Turner.**—Liverpool man, married, with considerable experience on a lathe, in brass and iron work, well up in hand turning and cutting, wishes employment in his trade in Canada. Has also had some experience at steam-fitting and electrical work. Good references.

2 **Moulder.**—Young Scotchman, seven years' experience in locomotive works as a brass moulder, is anxious to come to Canada. Union man, good references.

3 **Brazier and Tube Maker.**—Young married man who has worked nine years in large band instrument makers' shops, wants position as a metal worker, brazier or tube maker in Canada. Has had long experience at brass and copper work, and can run a lathe. Is member of union not represented in Canada.

Carpenters and Joiners.

4 Young married Englishman with considerable experience as a **Shop Fitter**, and qualified to take a position as general foreman in any carpentering work, wants position in Canada. Good references, non-union.

5 Young man, single, with six years' experience in a builder's work shop, competent **Carpenter and Joiner**, wants work in Canada. Non-union, and good references.

6 **Cabinet Maker.**—Who has been working for years in London, England, with a mantel and looking-glass manufacturer, is anxious to communicate with Canadian manufacturers who can give him employment in his trade on arrival in Canada.

126 **Picture Frame Joiner.**—Young, married Englishman, with 11 years' experience in the moulding and picture frame trade at very fine work, wants position in Canada. Has worked on oak and white wood fancy mouldings and general fitting. References, non-union.

Compositors.

7 **General Letter Press Printer.**—With 20 years' experience in a first-class English office, wants position in Canada in printing office. Has knowledge of machine ruling, die stamping, office work, etc. Married, union, and excellent testimonials.

8 **Music Compositor and Monotype Operator.**—15 years' experience in American and English houses, wants position in Canada. Former union man, married, with good references.

9 **Machine Minder.**—Young man with four years' experience in printing shop as machine minder. Non-union. Would come to Canada if he could secure position at his trade.

Engineers.

10 **Engine Driver and Fitter.**—Young Englishman, married, with thorough experience with locomotive, traction engines and steam cranes, etc., wants position in Canada. Non-union, good references.

11 **Locomotive or Crane Driver.**—Young Englishman, single, with several years' experience with Great Western Railway Co., wants position in his trade in this country. Non-union.

12 **Engine Driver.**—Married Englishman coming to Canada wants position as engine driver here. Has had 14 years' experience at driving and stoking in the Old Country, and is accustomed to all kinds of engines, dynamos, etc. Non-union.

13 **Marine Engineer.**—Young Welshman, single, who has served his apprenticeship as a marine engineer, wants position at marine or any general engineering work in this country. Has had experience at repairing, improving and tool-making, and is thoroughly qualified at every branch of the trade. Excellent references. Non-union.

14 **Marine Engineer.**—Londoner, married, with long experience with marine engines and boilers on all kinds of steamships, wishes to secure employment in Canada ; is thoroughly qualified to run any engine or locomotive, and is a good, handy man with machinery of all kinds. Non-union, and splendid references.

15 **Marine Engineer.**—Young Englishman, single, with 12 years general engineering experience, 5 years with the Taff Vale Railway and 7 years' marine experince, the last two as chief engineer, would like a position in Canada. Holds a first-class Board of Trade certificate. Non-union and excellent references.

16 **Mechanical Engineer Foreman.**—Young Englishman with 8 years' experience at general engineering work, during part of which time he supervised the work of others, wants position in Canada. Would make a good handy man for any factory as a general repairer of machinery and tools. Non-union and good references.

17 **Mechanical Engineer.**—Englishman with 14 years' experience with hydraulic machinery and gas engines, and considerable general engineering experience, wants position in Canada. Has served some time as an engine erecter and millwright. Testimonials on request. Non-union.

18 **Mechanical Engineer.**—Young man with 4 years' general engineering experience, who can do engine fitting, testing, millwright's work, and turning, wants position in Canada. Good references, Y. M. C. A. man, non-union.

19 **Mechanical Engineer.**—With good technical training, nine years' experience, chiefly at repairing machinery and pattern-making, would like position in Canada. References. Non-union and educated.

20 **Mechanical Engineer** with 20 years' experience on all classes of engines, marine and stationary, accustomed to all kinds of work around machinery, with good testimonials, wants a position in an engineering establishment in Canada. Excellent references. Non-union.

127 **Druaghtsman.**—Young, single Englishman, with 9 years' experience in first-class English machine works, who has served his apprenticeship at fitting, turning, planing, etc., in the shop, wants position in good engineering firm as draughtsman. Has a thorough practical knowledge of machinery. Non-union.

128 **Architectural Draughtsman, Surveyor, etc.**—Married Englishman, with 17 years' experience as a draughtsman and clerk of works in large English engineering and construction firms, wants position in Canada. Excellent references and a thoroughly competent man, capable of taking charge of large construction. Non-union.

Electricians and Electrical Engineers.

32 **Telephone Electrician**, with 4 years' experience as a general electrician in the telephone and switch-board department of a Liverpool firm, wants position in Canada ; is competent to instruct operators and at general repair work.

33 **Scientific Instrument Maker.**—Middle-aged widower with life experience in the making of electrical instruments, and other high-grade scientific apparatus, wants position in Canada. Has some knowledge of optical instrument making, and has worked for the best English firms. Member of the Mathematical Instrument Makers' Society.

34 **Electrical Engineer.**—Young Englishman with first-class technical training, and a thorough practical experience at all kinds of electrical engineering work in the best English establishments, wants position as supervisor in large Canadian electrical engineering works. Has served as chief works assistant in good English house, and is thoroughly competent to take charge of men. Excellent testimonials.

35 **Electrical Fitter.**—Englishman with thorough knowledge of switch-board and dynamo work, wants position as an electrical fitter with a good firm in Canada, good references, thoroughly competent. Non-union.

Fitters and General Mechanics.

42 **Fitter and Turner.**—Young Englishman with 7 years' experience as an engine fitter and turner in first-class English works. Good knowledge of high-grade engines, wants position in engine works in Canada. Good references. Member of Amalgamated Society of Engineers.

43 **General Fitter**, with 10 years' experience gas and water-works, and considerable knowledge of engineering, wants position in Canada. Has worked as locksmith. German by birth, with excellent references. Non-union.

44 **General Fitter.**—Young Englishman who has served apprenticeship in good English works as engine fitter, wants position in Canada. Has a general knowledge of engineering work and repairing. Can furnish good references. Non-union.

45 **Engine Fitter.**—Englishman with 15 years' experience as engine fitter, 3 years of which were spent in Africa, wants position in large engine works and locomotive shops. Non-union. Excellent references.

46 **Engine Fitter and Turner.**—Young Englishman with good technical training and considerable experience on locomotives, having been engaged in building and erecting them in all branches, wants position in Canada. Is a thoroughly competent man, and has some knowledge of marine engines. Served his time on the Great Western Railway. Member of Amalgamated Society of Engineers. Good references.

47 **Steam Fitter.**—Middle-aged Englishman with life experience at the plumbing trade, and practical experience as a tinsmith, sheet zinc and iron worker, wants position in Canada. Was formerly a member of the British Army, serving in the Royal Engineers, during which time he was employed as foreman of works. Has certificates for building construction and levelling. Non-union. Good references.

48 **Fitter and Turner.**—Young married Englishman, with 16 years' experience as a general machine fitter and repairer, wants position in Canada. Has a thorough knowledge of textile, brewery and dyeing machinery. Would be a handy man around any factory as a general machine repairer. Non-union. Good references.

49 **Fitter.**—Young man who has served his time as fitter in a tramway company in Wales, and has a thorough knowledge of machinery, wants position in Canada. Non-union. Good references.

50 **Fitter.**—Young Englishman, married, intending emigrant to Canada, wants position as steam fitter in this country ; total abstainer ; industrious and willing.

51 **Plumber and Sanitary Engineer.**—Middle-aged Englishman, married, with 26 years' experience at the plumbing trade, would come to Canada if he can secure position. Non-union. Good references and a thorough knowledge of his trade.

Machinists.

52 **Milling Machinist.**—Young Englishman with 8 years' experience as milling machinist, with good English firms, wants position in Canada. References. Member of the Amalgamated Society of Engineers.

53 **Machinist.**—Young married Englishman with 16 years' experience in engine works at slotting, planing and drilling machines, wants position in Canada. Union man.

54 **Telegraph Machinist.**—Young man with 4 years' experience in the Government telegraph works at repairing apparatus in the stores department, wants position in Canada. Good references. Member of the Stores' Association, G.P.O., England.

55 **Machinist.**—Married Englishman with 17 years' experience in the British naval dock yards at milling, shaping, boring, drilling and screwing, is anxious to come to Canada if he can secure a position in his trade. Can secure good references. Non-union.

56 **Shaper and Planer.**—Young married man with 18 years' experience at his trade in good English works, wants position as shaper and planer in Canadian machine shop. Union man and can secure good references.

57 **Hand Miller.**—Young married Englishman with 14 years' experience at his trade, who has worked all classes of milling machines, horizontal and vertical profiling and slot drilling, with some experience at fitting, wants to come to Canada if he can secure work at his trade. Has references. Union man.

58 **Roll Turner.**—Young married Englishman with 20 years' experience as round turner in large iron works in England, who has served 7 years as head foreman in rolling mills, would come to Canada if he can secure good position. Non-union. References.

59 **Scale Fitter.**—Young Englishman with 12 years' experience as scale and weighing machine fitter, with some years' experence at the bench, wants position in Canada. Non-union.

60 **Metal Polisher and Nickel Plater.**—Young Londoner with 4 years' experience at his trade, working on bicycle parts and brass fittings for phonographs, would come to Canada if he could secure work. Non-union. References.

61 **Galvanized Sheet Iron Worker.**—Englishman, married, with life experience as a maker of galvanized iron goods, such as buckets, baths, water cans, etc., would come to Canada if he can secure position at his trade. Good references, sober and industrious. Some knowledge of the windmill business.

63 **Iron and Steel Sheet Roller.**—Middle-aged Englishman, married, with 20 years' experience in large English mills, accustomed to wide and narrow rolling of all thicknesses, wants position as sheet roller in Canada. Non-union. References.

Miscellaneous.

70 **Accountant for Ship Yard.**—A competent accountant and bookkeeper, with good testimonials and long experience in large ship and engine building and repairing works in Great Britain, seeks similar work in a large Canadian establishment.

71 **Brick Maker.**—Englishman, married, with life-long experience in the manufacture of machine and hand-made bricks and tiles, is anxious to secure work in a brick and tile factory in this country. Is accustomed to repairing brick making machinery and running engines. Has first-class references and has made a successful invention in bricking apparatus.

72 **Brick Maker or Manager for Brick Works.**—Competent man, 19 years' experience as a brick works manager and engineer in England ; 40 years of age. Is anxious to secure similar position in Canada. A good, all-round man, well recommended.

73 **Bridge Plater.**—Scotchman, with 16 years' experience in all classes of bridge and structural steel work, with the best Old Country firms. Will pay his own passage to Canada if he can secure work at his trade on arrival. Can take position as foreman, and has splendid references.

74 **Brewery Worker.**—Englishman, 10 years' experience as a tun room and copperside man in the best English breweries, is anxious to secure work at his trade in Canada. Can do any general work around a brewery, and will furnish references on request.

75 **Boot and Shoe Trade.**—Young Englishman, with 8 years' experience in a boot and shoe factory in England, sober and industrious, wants position as a clicker and pattern cutter in a Canadian shoe factory. Has worked on both men's and women's shoes. First-class references.

76 **Cheesemaker.**—Englishman, with thorough knowledge of the cheese-making business in England, wants to come out to Canada and obtain employment in his trade in this country. References on request.

77 **Architect.**—Young Englishman, with 10 years' experience at drafting and general surveying work in Kimberley, South Africa, wants position in Canada. Non-union. Splendid testimonials.

78 **Paper Warehouseman.**—Young Londoner, with 6 years' experience as warehouseman, in large London firm of paper dealers, well up in all lines of paper, wants position in Canada. Good references. Non-union.

79 **Clothing Warehouseman.**—Young Scotchman, with 7 years' experience in shipping department of a large Glasgow wholesale clothing house, well up in checking, measuring, etc., classing and testing yarns, wants position in Canada. Non-union. Good references.

80 **Dyer.**—Young married Englishman, with 16 years' experience as foreman dyer of pieces, wool and rags ; 22 years in the employ of one firm, wants to come to Canada if he can secure similar work. Non-union and first-class testimonials.

81 **Bleacher and Dyer.**—Young married Englishman, now residing in Portugal, with 16 years' experience in dyeing works, and a thorough knowledge of dyeing and bleaching in all its branches, has been in charge of the finishing and shipping room at the Oporto branch of a large English firm for some years, and is fully qualified in every particular. Good references. Non-union.

82 **Analytical Chemist.**—Young man with thorough technical training, graduate of a German technical institute, speaking French, German and English, wants position in Canada as analytical chemist or engineer. Member of the Society of Chemical Industry, and first-class recommendations.

89 **Lithographer.**—Young, single Englishman, with 8 years' experience in a prominent London house at his trade, and two years' experience in Canada, wants position here. Not a union man at present. References.

90 **Locomotive Fireman.**—Young Englishman, with 7 years' experience as locomotive fireman, will come to Canada if he can secure similar work. Non-union. References.

91 **Mill Board Maker.**—Middle-aged, married Englishman, with over 20 years' experience as a mill board manufacturer, 9 years as fireman of works, wants position in Canada. Non-union. Excellent references.

92 **Photographer.**—Young married Englishman, with 15 years' experience in England and America in all branches of the photographic business, specialist on commercial publishing and engineering work, wants position in Canada. Can do excellent work, will furnish samples and testimonials. Non-union. Has been in business for himself.

93 **Colotype Plate Maker and Overseer.**—Young, single Englishman, with 12 years' experience in photographic work, thorough knowledge of collotype printing and post-card publishing, wants position in Canada. Has been overseer of printing departments for 5 years. Non-union. Good testimonials.

94 **French Polisher.**—Middle-aged London man, with 15 years' experience in all branches of the polishing trade, will come to Canada as French polisher, if position assured.

95 **Glass Painter and Decorator.**—Young single Englishman, with 15 years' experience in the business English houses as a glass painter, embosser and decorator, wants position of a similar nature in Canada. Has done some of the business work in London. Non-union. References.

96 **Timber Sawyer.**—Young married Londoner, with 12 years' experience as a timber sawyer in London and Australia, would come to Canada if position is assured in his trade. Non-union. References. Wants passage advanced on security of life policy.

97 **Wool Sorter.**—Young married Scotchman, with 21 years' experience in the wood business as classer, sorter and blender, both at home and in the colonies, would come to Canada if employment assured in his trade ; can take position as manager. Non-union. References.

98 **Soap Maker.**—Dublin man, anxious to come to Canada, wants position as soap maker. Has had good practical experience and can do all kinds of work.

99 **Ship Builder.**—Middle-aged Scotch ship builder, who has come through the various branches of ship-building and repairing, been manager of yards for 20 years, wants position in Canada in shipyards. Can look after men, or would start upon his own account if assisted. Non-union. Excellent testimonials.

100 **Blanket Manufacturer.**—North of England blanket manufacturer, who has run his own plant for a number of years, would like to obtain employment as a manager or foreman in a Canadian blanket house. Knows the trade from the raw material to the finished product, and is experienced in extracting wool for fine goods.

101 **Basket Maker.**—Edinburgh willow basket maker, intending emigrant to this country, wishes to obtain a responsible position with a good basket manufacturer. Is a specialist on spale work, and would be glad to start a factory of his own if assisted with some capital.

102 **Bookbinder.**—London man, with 5 years' experience at bookbinding, with a well-known London house, competent in all branches of binding, is anxious to secure work at his trade in Canada. Union. References.

103 **Chemical Maker.**—Young married Englishman, with 10 years' experience in the manufacture of nitric and hydro-chloric acid, ammonia and similar products, is anxious to come to Canada if he can secure work at his trade. Excellent references. Non-union. Will be ready to go out about the middle of July.

104 **Color and Paint Maker.**—Young London man, single, 14 years in the employment of one firm, is anxious to secure work in a paint manufactory in Canada. Is well qualified to make all kinds of colors and has a thorough experience. Non-union. Good references.

105 **Clay Moulder.**—Young man, married, with 8 years' experience as a chimney-top maker, and a thorough knowledge of the clay moulding and glazing business, wants position in Canada. Has also a knowledge of brick making. Good references. Non-union.

106 **Cloth Looker.**—Young married Englishman, with 16 years' experience in the employ of a bed quilt manufacturer, well versed in all that pertains to the woollen and cotton business, wants position in a Canadian factory or warehouse in his line. Good references. Non-union.

Printer and Compositors.

107 **News Jobbing.**—Compositor, with some experience on stone imposition, with good English firms, wants position at his trade in this country. Non-union. First-class references.

108 **News and Jobbing.**—Man, with some experience on Linotype matter make-up, and stone work in good English houses, wants position in Canada. References. Young, married, and non-union.

Smiths.

109 **Drill Blacksmith.**—Young, single Englishman, with 10 years' experience as drill blacksmith in Birmingham waterworks, wants position in Canada at his trade. Non-union. Good references.

110 **Shoeing and General Smith.**—Middle-aged married man, with 27 years' experience as a general blacksmith, registered and accustomed to every branch of smith work and repair, would come to Canada if he can secure position.

111 **General Smith.**—Young man, with 7 years' experience as an angle, ship, and engine smith in the Portsmouth dock-yards, wants position in Canada. He is a fully qualified journeyman, has good references. Union man.

112 **General Smith.**—Middle-aged married man, who has worked all his life as a general blacksmith with English railways and other large plants, wants position in Canada.

125 **Foundry Blacksmith.**—Married Englishman, with 21 years' experience in engineering and general wheelwright shops, well up in all classes of steel forgings, wants position in Canada. Excellent references, non-union, and holds certificates of good conduct from the British Navy.

Watchmaker and Jewellers.

113 **Jewellers' Manager.**—Young married Englishman, with 15 years' experience in the jewellery business, wants position as manager or commercial traveller for a good house ; is well versed in the middle class trade. Non-union. Splendid references.

114 **Watchmaker and Jewellery Salesman.**—Young Scotchman, with 12 years' experience at watch and clock repairing, being in charge of whole store during master's absnce, wants position in Canada. Non-union. Excellent references.

115 **Watchmaker.**—Young man with 10 years' experience at the watch repairing trade, accustomed to turning and pivoting and general jewellery repairing, some shop experience, wants position in Canada. Non-union. Good references.

116 **Watch and Clock Repairer.**—Young man, with 9 years' experience at watch and clock repairing, wants position in Canada. Splendid references. Non-union.

117 **Watchmaker and Jewellery.**—Young man, with 6 years' experience at watch, clock and jewellery repairing and making, good at soldering and with thorough understanding of the best French and English clocks, wants position in Canada. Non-union. Excellent references.

118 **Clothing Warehouseman or Manager.**—Young, single Englishman with 12 years' experience in large clothing establishments in London, wants position as warehouseman or manager of a department in a first-class Canadian clothing house. Excellent references, good experience, and thoroughly reliable.

119 **Cloth Looker.**—Young, single Englishman, with 7 years' experience at his trade in first-class English houses, wants position in Canada. Knows the trade from the spinning room up. Is well recommended, union man.

120 **Foreman Cloth Finisher.**—Married Englishman, with 33 years' practical experience in all classes of woollens and worsteds, wants position in Canadian house. Has been manager of the cutting, scouring, milling, crabbing, etc., departments, and is a fairly competent man. Non-union, good references.

121 **Spinning Over-looker.**—Young, married Englishman, with 13 years' experience in a large English spinning mill in Yorkshire, wants position in a Canadian factory. References. Non-union.

122 **Wall Paper Block Printer and Stenciller.**—Young, single Englishman, with 8½ years' experience at his trade, wants position in Canada. Is an expert at wash and body color printing, and knows stencil cutting.

123 **Tailor and Cutter.**—Married Irishman, with 21 years' experience at his trade, 14 years as a master cutter, and a good knowledge ladies' tailoring, wants position in Canada. Non-union. Excellent references. Holds diplomas for his work.

124 **Linen and Cotton Handkerchief Warehouseman.**—Young, single Englishman, with 9 years' experience in large linen and cotton warehouse in Manchester, in the handkerchief branch, wants position as shipping clerk in Canadian house. Non-union.

Trade Enquiries

NOTE.—For further information regarding any inquiry mentioned under this heading or the names of inquiries, apply by numbers to the Secretary, at Toronto.

446 **Agent.—Englishman** would like to represent a few good Canadian houses in **Great Britain.** Excellent references, long experience, and good connections.

447 **Agent.—Belgian** commission agent with splendid connections wants to represent a few good houses exporting butter, cheese, provisions, or other lines. References; enterprising and experienced.

448 **Agent.**—Young man speaking French, German and English fluently would like to hear from firms who could use his services as a representative in **Great Britain** or the **Continent.** Good references.

449 **Apples, Cheese, Lard and Cured Meat.**—A large wholesale grocery merchant of **Aberdeen, Scotland,** desires to be put into communication with Canadian exporters of apples, cheese, lard and cured meats.

450 **Asbestos.—Tyne** firm, manufacturing asbestos goods, is prepared to consider samples and prices of Canadian asbestos in the crude and fibre.

451 **Axe Handles.**—An **Australian** firm, importing large quantities of axe and other handles, is anxious to receive Canadian catalogues and lowest export prices upon the basis of f.o.b. steamer, New York. It is necessary to receive samples of axe handles (they can be cut) by mail, in order to see the standard of the qualities quoted.

452 **Band Saws, Agricultural Machinery, Cottons of All Kinds.**—Well-known manufacturers' agent, in the **Phillipines,** thoroughly in touch with all the markets in the Orient, wants to hear from Canadian manufacturers who can export above articles. Band saws suitable for cutting hardwood wanted, 6" to 14" wide. Quote f.o.b., New York.

453 **Beeswax.**—A Manchester firm wishes to obtain prices and samples of beeswax from Canadian shippers of same.

454 **Birch, Oak and Ash Boards.—Bradford** firm, with a large demand for birch, oak and ash boards of the primest quality, asks for Canadian shippers who are in a position to guarantee prompt shipments. Prices and other particulars to be given for c.i.f. Bradford.

455 **Broom Handles, Dowels and Chair Rungs.—A London** firm would like to hear from Canadian manufacturers who are in a position to fill orders for broom handles, dowels and chair rungs. Details of the goods required: Broom handles, 50" x 1/8"; chair legs and fronts, chair reeds or dowels, 14" or 42" x 5/8", 14" or 42" x 11/16, 13" x 5/8", 13" x 11/16. They would purchase dowels in quantities of fifty thousand gross at a time, and Canadian manufacturers wishing to take the matter up should send a sample of each line, and quote per gross c.i.f. London.

456 **Butter and Cheese.**—An importing house in the city of **Altamira, Mexico,** wishes to make connection in Canada for the purchase of butter and cheese.

457 **Canned Apples.**—Old-established **Leeds** firm desires to make arrangements with Canadian exporters of canned apples and similar fruit for regular shipments.

458 **Canned Fruit and Evaporated Apples.**—An old-established

Tyne firm is prepared to handle consignments of all classes of canned fruits and evaporated apples, and asks for Canadian exporters of these products.

459 **Canned Lobsters, Lard, etc.**—A general commission agent in **Constantinople** reports an opening for Canadian provisions, canned lobsters, and other goods, lard, etc., and asks to be placed in communication with first-class exporters.

460 **Canned Fish and Meats.**—An importing house in the city of **Manzanillo, Mexico**, wishes to make connections in Canada for the purchase of rough and dressed lumber.

461 **Canned Meats and Fish.**—An importing house in the city of **Altamira, Mexico**, wishes to make connections in Canada for the purchase of canned meats and fish.

462 **Canned Goods.**—A large firm in Birmingham, having a good connection, wishes to represent a first-class Canadian firm manufacturing goods saleable to grocers in Great Britain.

463 **Cloths and Dry Goods.**—An importing house in the city of **Altamira, Mexico**, wishes to make connections in Canada for the purchase of cloths and dry goods.

464 **Carbide of Calcium.—Tyne** firm asks for prices of carbide of calcium from Canadian exporters, with a view to purchasing when market is short. Prices to be quoted for shipments to Newcastle-on-Tyne in 25-ton lots in cases of 1 cwt. each.

465 **Chair Legs and Spindles.**—A **Manchester** firm asks for prices and samples of chair legs and spindles from Canadian manufacturers.

466 **Commission Agent.**—A commission agent of **Port of Spain, Trinidad**, is anxious to communicate with Canadian manufacturers, with the view of representing them and introducing their lines into Trinidad and the neighboring islands, on a commission basis.

467 **Distilled Water.—Cobalt** mining camp wants to purchase this commodity for drinking purposes.

468 **Evaporated Apples.**—A **Yorkshire** firm desires to hear from Canadian exporters of evaporated apples. Full particulars to be given.

469 **Evaporated Apples.**—A prominent **Hull** produce firm is open to hear from Canadian exporters of evaporated apples, packed whole in 50-pound boxes.

470 **Flour, Oats, Hay and Lumber.**—A merchant in the Bahamas wishes to be put in communication with Canadian shippers of flour, oats, hay and lumber.

471 **Essential Oils, Wintergreen, Sassafras and Peppermint.**—A **Manchester** firm asks for prices of essential oils, wintergreen, sassafras and peppermint, from Canadian manufacturers.

472 **Excelsior.—London, England**, house desires to purchase Excelsior for South Africa in Canada; must be hydraulically pressed and in bales. Quote in English ton. Prices range £3 to £6 per ton. Further particulars at this office. Good business in sight.

473 **Garden Seats, School Desks, etc.**—A large English firm of timber importers invites catalogues and prices from Canadian manufacturers of garden seats, school desks, and similar marketable commodities in the timber line. They must be made of oak or other suitable timber, and cut to English patterns, with or without the necessary ironwork. Prices c.i.f. any port in the north of England.

474 **Glazed Kid, Boots and Shoes, Shoe Polish.**—Australian commission house, with travellers covering whole of Australia, would like to hear from a few good Canadian houses who can do an export business in Australia or New Zealand.

475 **Hickory Perambulator and Go-Cart Handles.**—Large Australian importing house wants to buy these handles in Canada. Good orders, spot cash payment, samples on request with further description.

476 **Horse Fountain or Drinking Trough.—Ontario** town is anxious to purchase the above article at once.

477 **Knock-down Furniture, Light Wagons, Agricultural Machinery.**—A **South African** firm desires to obtain catalogues, prices, etc., from Canadian manufacturers of knock-down furniture, such as bedroom suites, etc., also of light wagons, pony traps, and agricultural machinery.

478 **Ladies Silk Belts, Barbers' Supplies, Bentwood Chairs, Toilet Combs, Chenille Curtains, Felt Carpet, Art Furniture, Go-Carts, Advertising Novelties, Wax Paper, Wood Novelties, Rugs, Towels.**—First-class **Melbourne, Australia**, importing house, with large trade, is anxious to purchase these goods in Canada. Payment, 30 or 60 days' draft. Will sell goods exclusively of one manufacturer, if desired.

479 **Lumber.**—Inquiry is made for the names of lumber brokers in Canada who are in a position to ship in such quantities as are required by a fairly large manufacturer of wood mantels, folding partitions, church and school furniture, etc.

480 **Lumber.**—An importing house in the city of **Colimo, Mexico**, wishes to make connection with dealers on the **Pacific Coast** of Canada for the purchase of lumber.

481 **Lumber, Rough and Dressed.**—An importing house in the city of Manzanillo, Mexico, wishes to make connections in Canada for the purchase of rough and dressed lumber.

482 **Lumber, Timber Flooring, and Box Shooks.**—An importing house in the city of **Tepic, Mexico,** wishes to make connections in British Columbia, Canada, for the purchase of lumber, timber, flooring and box shooks.

483 **Manufacturers' Representative.**—Well-known commission agent in **Belgium** and **France**, good connections in both countries, would like to hear from Canadian firms desirnig representation there. First-class references in Canada, and is already representing several Canadian houses, chiefly exporters of raw material. Particulars at this office.

484 **Maple Blocks.**—A large firm in the north of **England,** manufacturing bobbins for use in spinning mills, is open to hear from Canadian exporters of maple blocks, in various sizes suitable for this purpose.

485 **Mineral White, Whiting and Kaolin.**—A **Manchester** chemical firm broker asks for prices c.i.f. of mineral white, whiting and kaolin from Canadian exporters.

486 **Molasses.**—A merchant in the **Barbados** desires to be placed in touch with Canadian importers of fancy molasses.

487 **Oils, Liquor, Vinegar, Wines, Hams, Bacons.—Mexican** wholesale and retail merchants want to purchase the above articles in Canada. Payment monthly, good references, wants quotations on sample shipment.

488 **Picture Frame Mouldings, Turned Woods, etc.**—An old-established **Leeds** firm are buyers of plywood, 3 and 5 ply, in birch, maple or oak. Sizes: maximum, 60 inches by 42 inches; minimum, 24 inches by 18 inches. They can also dispose of picture frame mouldings, and all classes of turned woods, for use in the cabinet and building trades, and ask for prices from Canadian shippers.

489 **Potash.**—A **London** firm would like to hear from Canadian shippers of potash.

490 **Pulp-board Partitioning.**—A firm of egg importers in the **North of England** desire to get in touch with Canadian manufacturers of the pulp-board partitioning used by egg shippers.

491 **Redwood, Basswood and Poplar.—A North of England** firm is desirous of buying sawn squares of redwood, basswood or poplar in various sizes, 48" x 1" x 1" and upwards, the wood to be dry, tied in bundles and shipped underdeck, clear of knots and other imperfections, and to rank as first quality.

492 **Salmon.**—An old-established firm of fish merchants in **Leeds** are desirous of making arrangements with Canadian exporters of either frozen or fresh salmon.

493 **Seagrass.**—A **Liverpool** firm wishes to be placed in communication with Canadian shippers of seagrass (Zostera Marina), used for upholstery work.

494 **Slate Battens.**—A **Manchester** firm wishes to obtain prices of slate battens, sizes 1½" x ⅝", 2 " x ⅝", and 2" x ¾", from 6 to 12' long, from Canadian saw-mill owners.

495 **Spruce and Birch Deals, etc.**—A **Manchester** firm asks quotations for spruce and birch deals and birch legs and squares from Canadian shippers of same.

496 **Striped Wood File Board.**—A **Midlands** company wish to obtain quotations from Canadian manufacturers who can supply striped wood fileboards about 14" x 10". They purchase in lots of from 5,000 to 10,000 boards.

497 **Tallow.**—An importing house in the city of **Tepic, Mexico,** wishes to make connections in **British Columbia, Canada,** for the purchase of tallow.

498 **Three-ply Veneer.**—A **Manchester** firm asks for prices of three-ply veneer from Canadian manufacturers.

499 **Vulcanite Substitute.—Ontario man** has a good proposition to make to a man with capital who can assist him in the manufacture of a splendid substitute for vulcanite and insulating material. Product has never been used before, and enquirer has an abundant supply on his property in Ontario, which is available at a cost of $3.00 per cwt.

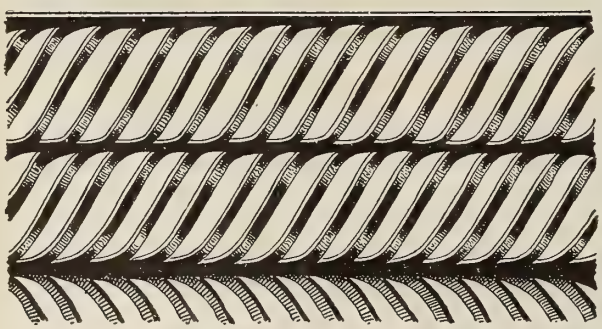
500 **Western Canada Representative.**—Well-known contractor and constructional engineer in **Winnipeg** desires to represent manufacturers of **Building Specialties** in the West. Covers territory between Lake Superior and Rocky Mountains.

501 **Wood Bedsteads and Bedroom Furniture.**—A **Manchester** firm invite correspondence from Canadian manufacturers of wood bedsteads and bedroom furniture.

502 **Wooden Handles.**—A **London** firm wish to purchase all kinds of wooden handles.

503 **Yellow Pine Sidings.**—A **Manchester** firm ask for prices of first quality, 2" yellow pine sidings from Canadian exporters.

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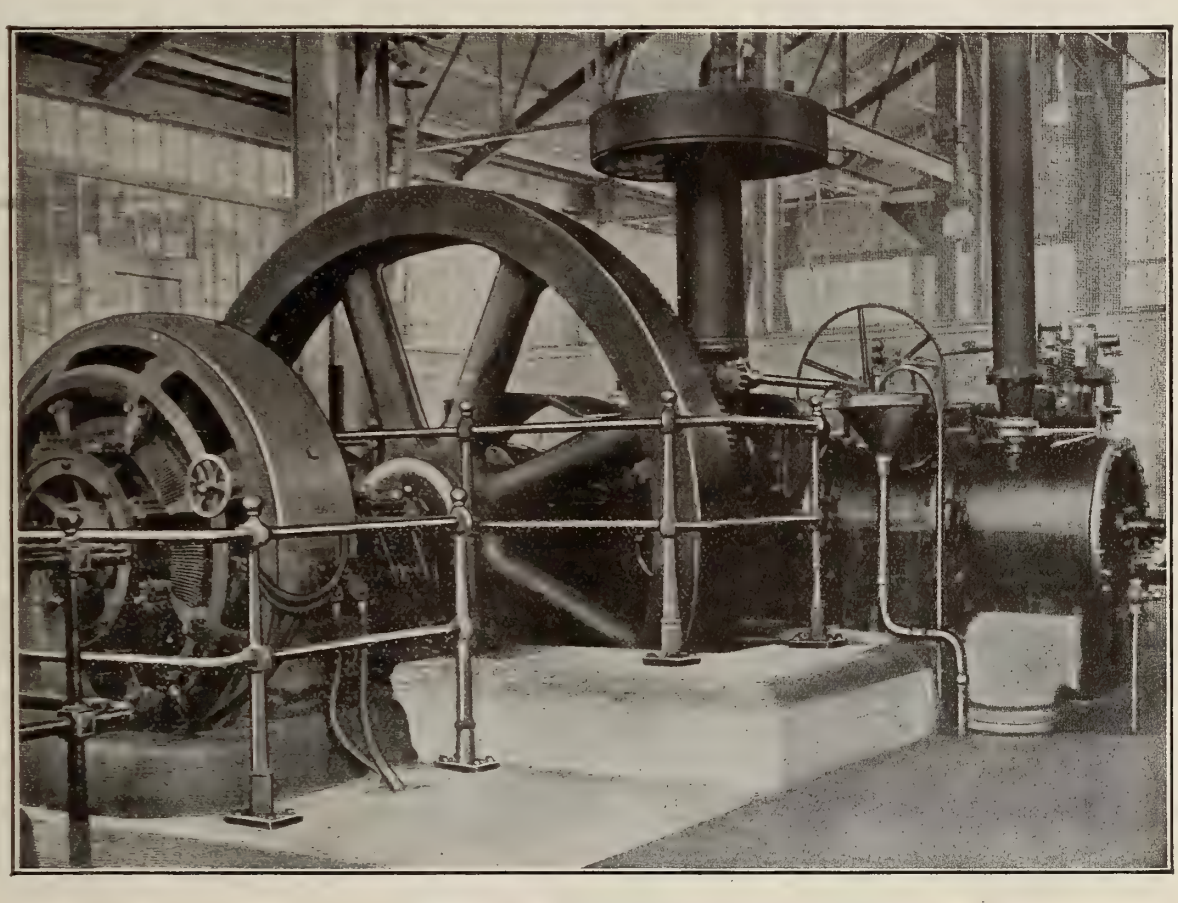
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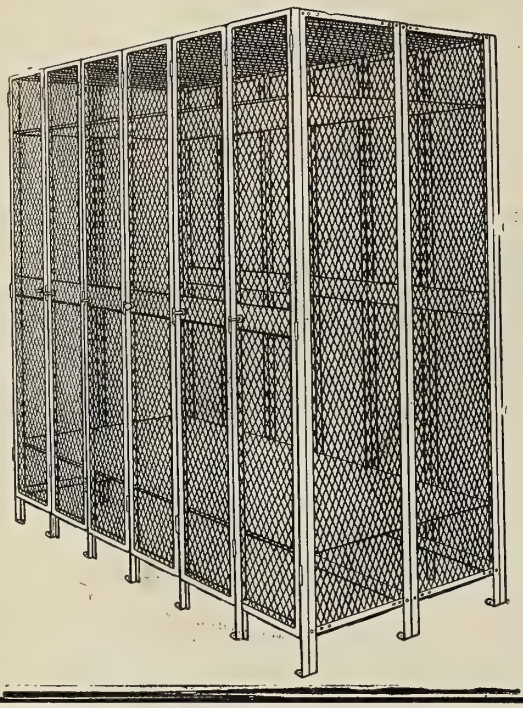
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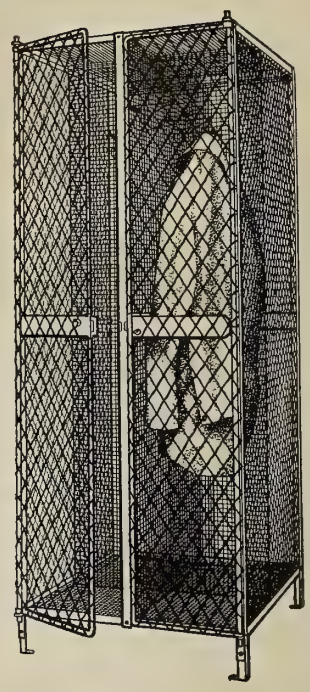
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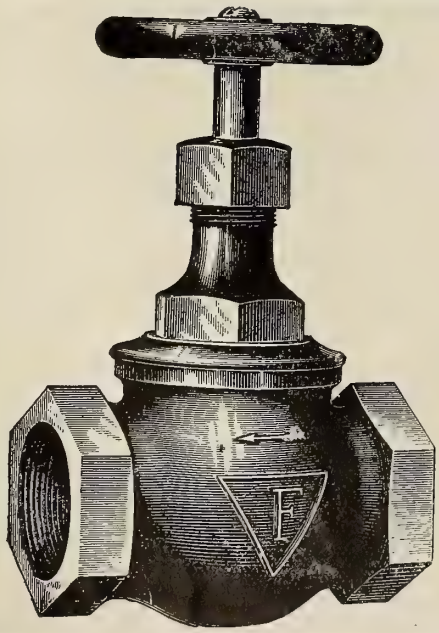
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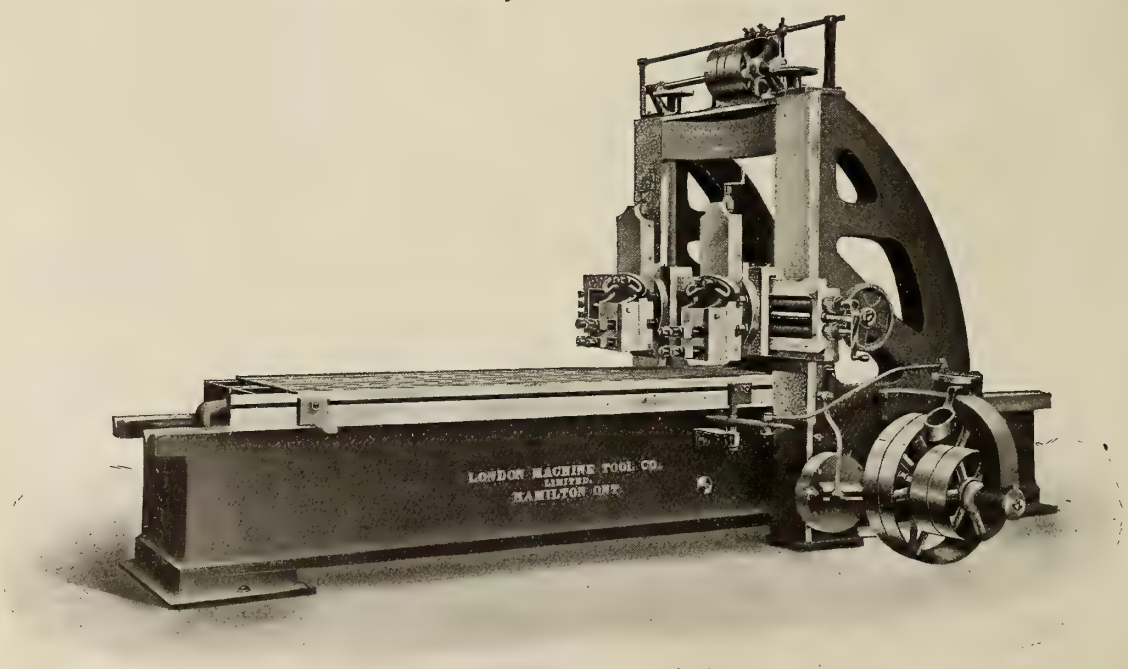
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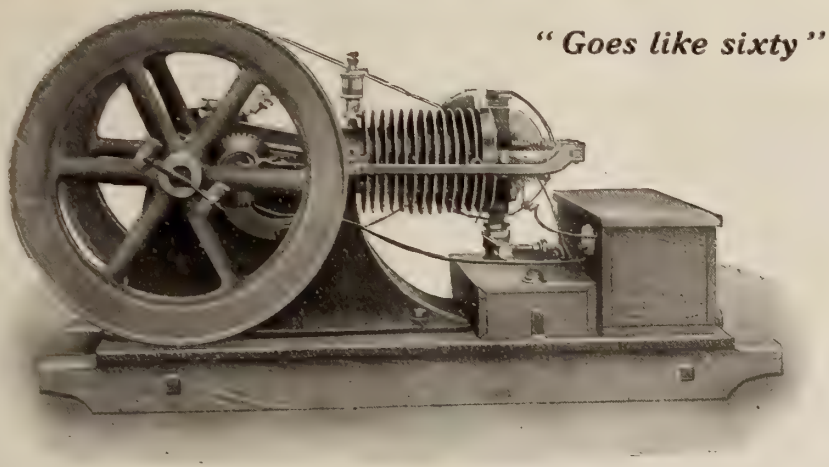
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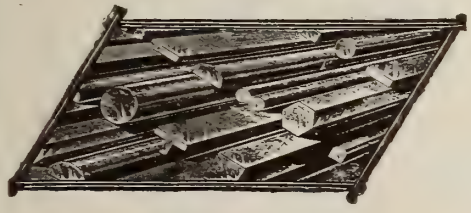
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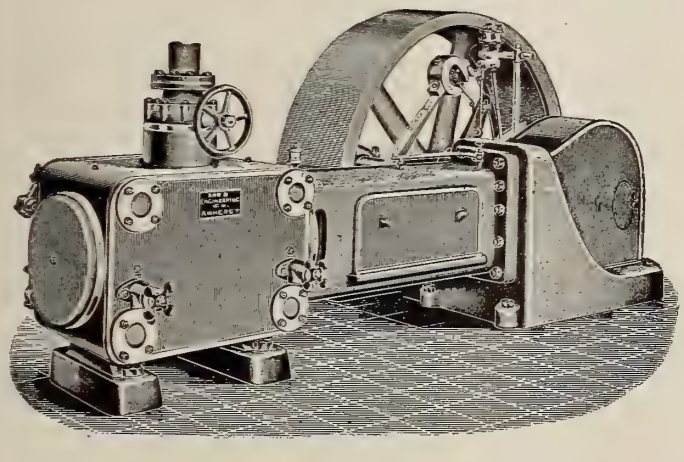
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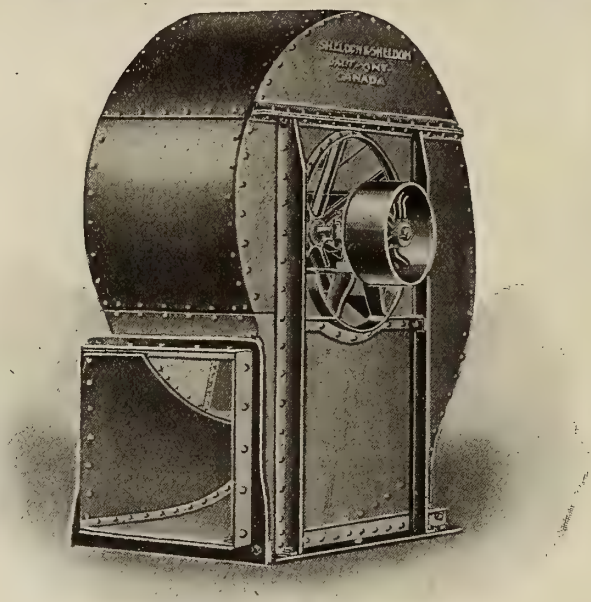
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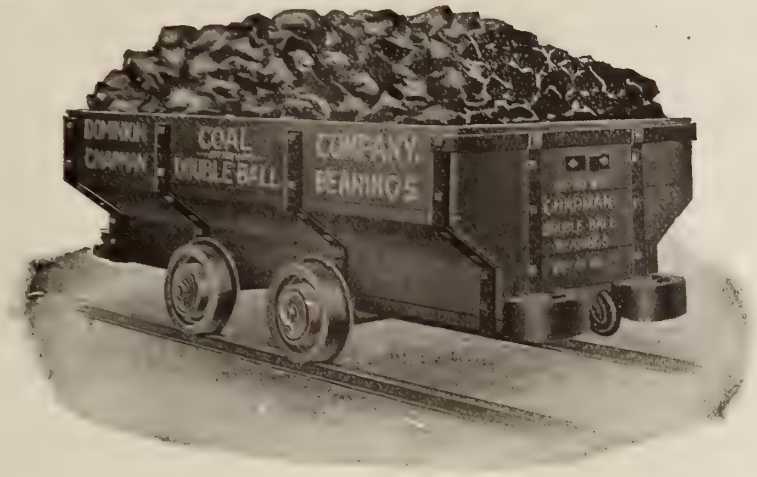
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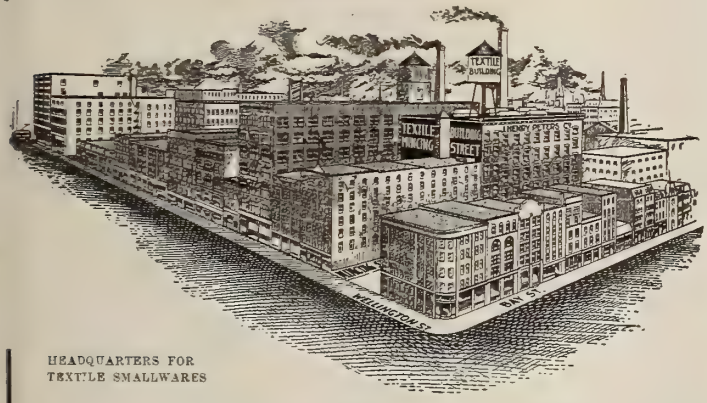
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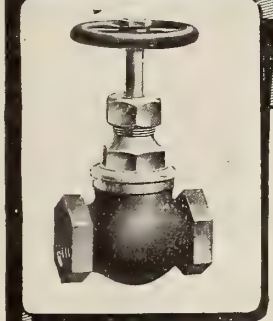
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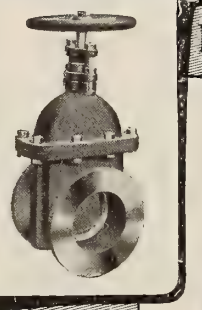
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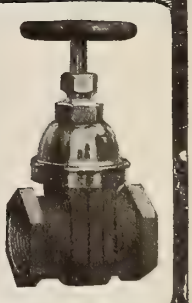
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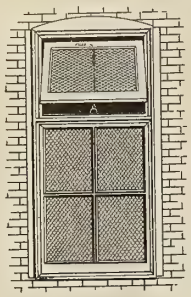


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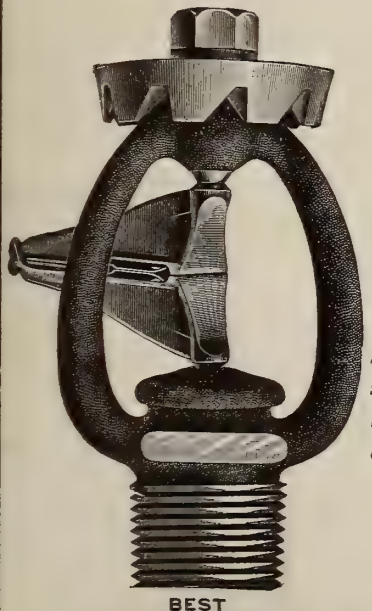
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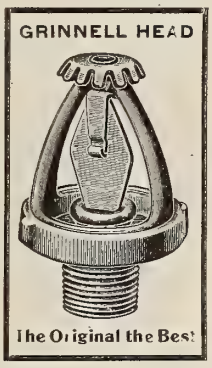
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Largest Watch Case Factory in the British Empire. Manufacturers of Gold, Silver, Gold-filled and Nickel Watch Cases of every style and size. Goods marketed exclusively through the wholesale trade. Correspondence solicited.

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BECHTELS LIMITED
Manufacturers of the SIMPLICITY line of
Wire Cut Brick Machinery
Capacities up to 100,000 per day. Perfect Carless Brick and Tile Driers.
Wheel Scrapers. Barrows, etc.

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Manufacturers of
Window Shades, Upholstery Goods, Lace Curtains, Curtain Poles, Fixtures, etc.
Office and Showrooms,
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Manufacturers of
Window Shades Shade Cloth
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32 St. Sulpice St. - - - MONTREAL
Factory - - LACHINE.

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GOOLD, SHAPELY & MUIR CO, Limited.
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Galvanized Steel Pumping and Power Windmills, Gas and Gasoline Engines. Grain Grinders, Iron and Wood Pumps, Tanks, Water Supplies, Custom Galvanizing.
Automatic Concrete Mixers.

ONTARIO WIND, ENGINE & PUMP CO., LTD., TORONTO.
WINDMILLS, PUMPS, GASOLINE ENGINES, TANKS AND SUBSTRUCTURES, WATER SUPPLY APPLIANCES, GALVANIZING.

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THE GEO. B. MEADOWS TORONTO WIRE, IRON, AND BRASS WORKS CO., Limited, TORONTO, ONT.
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Wire Cloth, Wire Work, Ornamantal Wrought Iron Work, Fencing, Bank and Office Railings, Window Fixtures, Elevator Guards, Mining Screens, Riddles.

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E. T. CARTER & CO.,
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Wool—Domestic and Foreign.
Cotton and Cotton Warps.

ROSAMOND WOOLLEN CO.,
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Manufacturers of Worsted Coatings, Suitings and Serges. Fancy Tweeds and Overcoatings in Wool only.

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Fully Ripened in Wood. Age Guaranteed by Government.

QUALITY UNEXCELLED

Distilled and Bottled by

HIRAM WALKER & SONS
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Walkerville, Canada

LONDON CHICAGO NEW YORK MEXICO CITY VICTORIA, B.C.

Executive Council

JULY MEETING.

The regular monthly meeting of the Executive Council was held in the Board Room of the Traders' Bank Building on Thursday, July 18th, at 2 p.m.

The Vice-President, Hon. J. D. Rolland, occupied the chair, other members present being: Messrs. C. C. Ballantyne, Montreal; H. Bertram, Dundas; C. A. Birge, Hamilton; Geo. Booth, Toronto; P. H. Burton, Toronto; W. Cauldwell, Montreal; R. J. Copeland, Toronto; J. A. Coulter, Ingersoll; J. W. Cowan, Toronto; J. F. Ellis, Toronto; P. W. Ellis, Toronto; Thos. Findlay, Toronto; J. Firstbrook, Toronto; H. W. Fleury, Aurora; S. Harris, Toronto; E. G. Henderson, Windsor; Jos. R. Henderson, Halifax; J. H. Housser, Toronto; Wm. McMaster, Montreal; Robt. Munro, Montreal; Denis Murphy, Ottawa; J. P. Murray, Toronto; W. C. Phillips, Toronto; T. A. Russell, Toronto; Alex. Saunders, Goderich; J. T. Sheridan, Toronto; Louis Simpson, Valleyfield; J. M. Sinclair, Toronto; Wm. Stone, Toronto; Dan. Wilson, Collingwood.

The Minutes of the June meeting, as published in INDUSTRIAL CANADA, were taken as read.

COMMUNICATIONS.

Communications were received as follows:

(*a*) From members of the Executive Council unable to be be present: Messrs. Geo. D. Forbes, Hespeler; Arthur W. White, London; D. J. Fraser, St. Johns; J. B. Maclean, Toronto; Geo. Brigden, Toronto; Frank A. Rolph, Toronto; Geo. E. Amyot, Quebec; T. F. Matthews, Peterboro'; Edward Gurney, Toronto; S. W. Ewing, Montreal; Wm. Robins, Walkerville; Jas. Davidson, Montreal, J. J. McGill, Montreal; Wm. Smaill, Montreal; S. J. Williams, Berlin; Chas. S. Meek, Toronto; C. H. Waterous, Brantford; A. S. Rogers, Toronto.

(*b*) From the Secretary of the Montreal Branch, stating that that body, in annual meeting assembled, urgently requested the Association to protest to the Dominion Government against the leeway in the Dumping Regulations allowed under Clause 6, Sub-section 7, of the Tariff of 1907. This communication was referred to the Tariff Committee.

(*c*) From the Secretary of the Toronto Branch, requesting permission for that Branch to extend its jurisdiction so as to include certain suburbs of the city of Toronto. Referred to the Reception and Membership Committee for Report.

Reports of Officers were then presented, as follows:

SECRETARY.

In the absence of the President, the Secretary reported that the visits to the various Branches had been completed. He congratulated the Association on the very able manner in which Mr. Cockshutt had represented its views at these Branch meetings, and expressed his belief that the experiment had been attended with good results.

TREASURER.

The Treasurer, Mr. Geo. Booth, read the statement of the receipts and disbursements for the month of June, showing a balance on hand on June 30th of $10,952.34.

On motion of Mr. Booth, seconded by Mr. Ellis, the report was adopted.

FINANCE.

The report of the Finance Committee recommended for payment monthly accounts totalling $1,315.04.

It presented details showing the overdraft of the Insurance Department, for which the Council decided to make provision.

The Committee reported a resolution which had been received from the Toronto Branch, expressing dissatisfaction with the room in which the Council meetings were held, and asked the Council for its pleasure in the matter. It was decided that the Finance Committee be requested to report what arrangements they could make for more suitable quarters at the next meeting.

The Committee's report also included a clause authorizing a grant of $25 to the British Welcome League.

The report was adopted.

COMMERCIAL INTELLIGENCE.

The report of the Commercial Intelligence Committee was presented by the Chairman, Mr. T. A. Russell, and considered clause by clause. It read in part as follows:

At the regular monthly meeting of the Commercial Intelligence Committee, held on Tuesday last, a number of important matters came up for consideration, among which were the following:

Collection of Overdue Accounts, etc.

A report was received from the Special Committee appointed to investigate the advisability of the Association establishing a department for the procuring of credit reports, collecting overdue accounts, and handling the claims of members against insolvent debtors. It was thought that perhaps a co-operative plan might be worked out whereby the Head Office of the Association could keep closely in touch with matters affecting the credit of buyers all over Canada, and that interested members could thus obtain valuable information obtainable in no other way. Without going into details, your Committee foresee many difficulties in the way of such a proposal, and recommend that it be held over for the time being. They do, however, feel that steps might safely be taken at once to establish a Department for the collection of overdue accounts, and for handling the claims of members against insolvent estates. Particularly in the collection of overdue accounts, it is believed that a great deal could be done by a solicitor acting as legal adviser for the Association and using Association stationery, in cases where individuals acting on their own account might be unable to show any results.

It is recommended, therefore, that the council approve of such a step on the understanding that details will be worked out by the Committee for submission to the Annual Meeting. The plan will probably include the engagement of a solicitor, who will act independently or connect himself with some well-known firm of lawyers, and who will devote himself almost exclusively to work of this kind. He can undertake the collection of accounts on a percentage basis, which will enable the Association to derive a small revenue from the Department, and in the case of assignments he can act for interested members collectively, thus insuring better and more prompt results, and at a cost which will be considerably less than members would have to pay if acting individually.

Translation Bureau.

It has been felt for some time that the Association's Translation Bureau was in need of reorganization, for as at present conducted it is taken advantage of by so few, and to such a small extent, that it is practically a dead letter. In eleven months ending May, only 43 translations have been made, for the benefit of 11 members, involving expenses of $12.28 and bringing in a revenue of $16.13. These figures are even less

than they were three years ago, when the membership was not nearly so large as it is to-day. The falling off is due, no doubt, to the fact that the Bureau is not advertised extensively. It is also believed that it is poor policy to charge a fee of a few cents to members who only use this service once or twice a year, and that for all it costs the Association it might well afford to do the work for nothing.

Your Committee would recommend, therefore, that arrangements be made with one or two translators whereby they would be paid a monthly salary, to report at the office once a day and attend to any work that required to be done, these translators to be specialists in the principal commercial languages, including French, German, Italian and Spanish. It is further recommended that the widest publicity be given to the fact that we translate for members ordinary correspondence up to 25 letters per year, from or into any of the above languages, absolutely free of charge; that we make a charge for letters in excess of 25 per year, also for letters which include long specifications or lengthy extracts from catalogues or price lists, tabulated statements, circulars, legal documents, patents, specifications, blue prints, commercial and Consular invoices, extracts from newspapers and revision of translations made by others. Heretofore our rate has been, from a foreign language into English, 25 cents per hundred words; from English into a foreign language, 40 cents per hundred words. Where any great amount is to be attended to this charge appears to be excessive, and for the advertisement it would give the Association we think we might well afford to reduce these rates to 15 and 25 cents per hundred words, respectively. As soon as it becomes generally known that the Association undertakes this kind of work and does it satisfactorily, there will, no doubt, be calls made upon us to translate other languages which are not so frequently met with, such as Russian, Norwegian, Japanese, Chinese, etc. We would therefore recommend that arrangements be made with interpreters in these languages to take care of work sent them by the Association from time to time at the old rates of 25 and 40 cents per hundred words.

Foreign Report Service.

Careful investigation has been made of the system adopted by the Association for procuring financial reports on foreign houses. This service was worked up into a high state of efficiency some three years ago, but owing to the limited use made of it by members it has been allowed to drop very largely out of sight. It is now recommended that advertising leaflets be prepared and circulated among members, along with the ordinary correspondence, and that if the business offering warrants it, steps be immediately taken to revive the old system.

Duty on Exhibits.

Attention has been called to the fact that whereas Canada admits United States goods intended for exhibition purposes free of duty on the understanding that they are to be shipped out of the country again, the United States has steadily refused to accord Canadian exhibitors the same privilege. This is felt to be decidedly unfair, but before making any recommendations, your Committee will first consult with the Association's representatives on the Exhibition Board.

The adoption of the report, moved by Mr. Russell, seconded by Mr. Munro, was carried.

RAILWAY AND TRANSPORTATION.

The report of the above Committee was presented by the Manager of the Transportation Department. It was as follows:

The regular monthly meeting of the Railway and Transportation Committee was held on Thursday, July 11th, at which the following subjects were dealt with:

Readjustment and International Rate Case.

Your Committee begs to report that a communication has been received from the Chief Traffic Officer of the Board of Railway Commissioners to the effect that the order in the International Rate Case had been signed by the Board, but owing to pressure of work the order did not reach your Committee in time for its meeting.

The Chief Traffic Officer stated that no date for the issue of the tariffs would be given in the order, as it will take some time to do the setting and printing, and besides this, the Board has no jurisdiction over United States lines in the Central Freight Association whose international tariffs have to be changed. The intention is that when the Chief Commissioner returns from the West about September 1st the railways will be required to show progress, and if it is decided that any unreasonable delay has occurred, an order fixing the date will follow.

Your Committee regrets that the Board of Railway Commissioners did not see their way to fixing a date for the new tariffs to become effective, as we had been led to believe would be done. The Manager was instructed to write the Commission to this effect, calling particular attention to the fact that the shipping season commences about September 1st, and that it was particularly desirable that the tariffs should become effective not later than that date. The Manager was also instructed to make every effort, by personal representation if necessary, to that end.

The following resolution is submitted for approval:

"That the Board of Railway Commissioners be asked to make a supplementary order to the order in the International Rate Case fixing a date when tariffs are to become effective."

Since the above meeting a certified copy of order of the Board of Railway Commissioners, No. 3258, has been received by the Department, and the following is a summary of the case:

The order of the Board states, in part:

"In the matter of the application of the Canadian Manufacturers' Association and others, upon hearing what was alleged on behalf of the applicants and counsel for the railway companies, and upon the report and recommendation of the Chief Traffic Officer, the Board doth order, That the special local class tariffs (known as 'town tariffs') of the Grand Trunk Railway of Canada, the Canadian Pacific Railway Company, the Michigan Central Railroad Company, The Wabash Railway Company, the Toronto, Hamilton and Buffalo Railway Company, and the Canadian Northern Ontario Railway Company, east of the Detroit and St. Clair Rivers, Lake Huron and the Georgian Bay and North Bay (east and south bound) and south of the Ottawa River, be reduced so as to place them all on the same mileage scale, and that for this purpose the table of mileage rates particularly set forth in the schedule hereto annexed, marked 'A,' which is hereby made a part of this order, be adopted as the basis by the said companies, etc. The rates in all cases to be based on the shortest workable mileage.

"For the purpose of compiling through special winter and summer class freight tariffs from points west of Toronto to points east thereof, the territory be divided into groups and the rates to Montreal to be as outlined in the memorandum of the Toronto conference of May 23, 1907.

"That from points competitive with the Lake and River lines the companies may publish from and to such competitive points such commodity rates as may be necessary to meet the competition of the water carrier, and shall also publish from Toronto and Hamilton to Ottawa and Montreal competitive class tariffs on the basis now existing, but not to exceed the mileage rates referred to.

"Through rates from the aforesaid groups shall be reason-

ably graduated to points east of Toronto on the basis outlined at the Toronto Conference of May 23, 1907.

"That the eastbound rates from the territory east of Toronto and Orillia, and east of and including Depot Harbor, Parry Sound and North Bay, be in accordance with the mileage scale referred to, which is considerably lower than the present basis.

"That to points in Quebec west and east of Hull, and east and south of Montreal, the through rates from the group territory as defined be arrived at in accordance with the reduced scale.

"That no special commodity rates now existing which may be lower than the corresponding class tariff rates herein prescribed shall be advanced by reason of the changes herein ordered or without the sanction of the Board.

"The said railway companies and connections are permitted to substitute the Canadian Classification from Detroit and Port Huron and from points west thereof *via* the Detroit and St. Clair crossings, and to scale the lower classes on the first class rates now existing.

"That the rates from Canadian points on the Detroit and St. Clair River frontier to all points east to the Atlantic and north to the Ottawa River shall in no case exceed the rates from Detroit and Port Huron as fixed.

"That in the adjustment of the International rates referred to in clause 'H,' the rates on raw materials from points in the United States to points in Canada shall not be advanced at the instance direct or indirect of the companies operating in Canada.

"No change shall be made in the west bound rates from Montreal to the grouped territory west of and including Toronto and intermediate points as a consequence of this order of the Board."

The proposed scheme, it will be seen, means a marked reduction in freight rates to the east from practically all points in Western Ontario. It removes the discrimination which now exists at frontier points in favor of the United States manufacturers. It reduces from Toronto many of the rates which the Toronto Board of Trade complained of. The consideration of the International Rate Case which was adopted by the Canadian Manufacturers' Association involved the Toronto Board of Trade case. It became apparent that the revision of the general mileage basis, which would be a factor in the adjustment of our case, would have a direct bearing on the discrepancies between the local tariffs of which the Toronto Board of Trade complained. As a result, general reductions have been made at such points as London, Brantford, Chatham, St. Catharines, Hamilton, etc.

As an illustration of how the new basis works out, the present first class rate Windsor to Montreal is 70 cents in the winter and 60 cents in the summer. The new basis will be 58 cents all the year round.

	Present 1st Class.	New 1st Class.
From Windsor to—		
Collingwood	50c.	42c.
Brockville	60	50
Orillia	50	42
Quebec	84	70
Halifax	92	78
Sydney	1.00	86
From Chatham to—		
Guelph	36	32
Toronto	38	36
Kingston	54	50
From London to—		
Hamilton	30	26
Toronto	36	32
Collingwood	38	34
From Hamilton to—		
Toronto	22	18
Berlin	24	22
Woodstock	22	20
Palmerston	30	28
St. Thomas	30	26
Clinton	32	28
North Bay	46	40
From Toronto to—		
Berlin	24	20
Guelph	24	20
Brantford	28	22
Woodstock	30	28
Stratford	30	28
Ingersoll	32	28
Penetang	34	30
Gravenhurst	34	32
Goderich	36	32
Southampton	38	34
Windsor	40	36
North Bay	46	38

The same scale will be used in revising the tariffs at th other common points.

A synopsis of the principal features leading up to the a justment is given herewith:

The companies submitted a draft scheme of the propos revision of rates on November 8th, 1906. A meeting was h in Montreal, December 19th, 1906, to consider same. The Manager of the Department considered the basis on the whole unsatisfactory. As a result of this meeting new tables were prepared, submitted to the Board on January 24th, but only reached us on February 15th, 1907. This scheme was most elaborate, but it was pointed out to the Board of Commissioners the result would be so disastrous that the officials of the railways could not assume the loss of such a large amount of revenue which would follow the adoption of the suggested figures. At the same time they recognized the authority of the Board's orders, but in that case the Board, of cou assumes the responsibility of the results. These tables volved a loss of revenue on the part of the Grand Trunk R or way of from half a million to a million and three-quar to dollars annually. The companies estimated that the Canadia Pacific Company's loss would equal two-thirds that of the Grand Trunk.

Although it was conceded that these figures merely represented approximations, the Board felt that in justice to the railways these statistics could not be ignored. It was also evident that an audit of the companies' books in order to verify these statements would postpone the decision of the Board indefinitely.

It was, therefore, suggested that a compromise might be arrived at for a tentative adjustment. Meetings with the Chief Traffic Officer of the Board of Railway Commissioners were held. As a result a resolution of the committee agreeing to a compromise on certain conditions was forwarded to the Board. This resulted in several new schemes being submitted by the railways. As they involved advances which the Board and your Committee could not consider, they were rejected. It, therefore, became apparent that the traffic managers of the railways were dodging the responsibility of the reduction, and if anything was to be done it was up to the Commission to do it. A final conference was held in Toronto on May 23rd, at which a scheme was outlined, which has been practically adopted and ordered by the Board, as already outlined.

Supplement No. 9 to Classification 12.

Your Committee reports the approval by the Board of Railway Commissioners of Supplement 9 to Classification 12. A number of advances had been recommended by the railways in this supplement, all of which were disallowed by representation of the Association.

Classification No. 13.

The resolution passed at the last meeting and approved of by this Council with regard to Rule 7 was forwarded to the Board of Railway Commissioners and duly acknowledged.

The Board approves of the revised classification as submitted, subject to the following conditions, alterations and amendments.

That the proposed change in the minimum weight of mixed carload shipments betwen points east of Port Arthur, as provided for in Rule 2, Section B, of the said classification, be, and the same is hereby, disallowed.

The present rule is that if the articles provided with a carload rating are of more than one class, the carload rate and minimum carload weight of the article in the highest class shall apply.

The change proposed is that the highest carload rating and highest minimum weight applicable on any article shall apply.

That Rule No. 7 be amended by adding to Section (A) the following provision, namely:

"These conditions are intended to cover risks necessarily incidental to transportation, but no such limitation, expressed or otherwise, shall relieve the carrier from liability for any loss or damage which may result from any negligence or omission of the company, its agents or employees."

Rule No. 7 covers owner's risk conditions.

That the proposed omission of the reduced rating of stoves that are returned to the shipper after having served their purpose for the protection from frost of perishable shipments be disallowed.

That the proposed increase in the minimum weight of matches in carloads from 20,000 to 24,000 lbs. per car be allowed, subject to the condition that the companies provide commodity tariffs for the shipment of mixed carloads of matches and woodenware at the minimum weight of 20,000 lbs. per carload as heretofore.

That Rule 20, describing the minimum charges or "smalls" rate be amended to read as follows:

"The minimum charge for any complete shipment of one or more classes between any two stations of one carrier will be one hundred pounds at first class rate, but not less than 35c."

The present rule is somewhat ambiguous in that it simply says that small consignments of one class, or including articles of several classes, will be charged at actual weight according to the classification of each article, but no single shipment will be taken for less than 100 lbs., 1st class, minimum charge 35 cents, whereas the new rule provides that it shall be the total charge between any two stations of one carrier.

Any person or company violating the provisions of Section 400, Sub-section 1 (misrepresentation) of the Railway Act shall in addition to the regular toll be liable to pay the company a further toll not exceding fifty per centum of the regular toll.

The said classification to become effective not later than September 1, 1907.

As previously reported, the owner's risk condition has been eliminated as against some 240 items, and where it remains it has been clearly defined.

The release which heretofore has been exacted in the case of shipments of furniture and similar commodities has been done away with.

Car Shortage.

The Department reported a communication from the Board of Commissioners enclosing the report of the Chief Traffic Officer and operating assistant *re* car shortage and delays in transit on the Canadian Northern. The manner of obtaining and compiling of certain information in regard to the car situation was left with the Manager.

Bills of Lading.

A draft of the conditions for the uniform bill of lading in the United States, as agreed upon by a joint committee of shippers and carriers, now before the Interstate Commerce Commission for approval, has been received. The same was held over for consideration when our proposed new bill comes up for discussion. The joint committee referred to has been working upon these new forms more than two years, and its members express confidence of the result of its efforts. Notwithstanding that the joint committee, representing substantially all the railroads in what is known as Official Classification territory, and sixty different associations in the same territory, with a total of about 800,000 members, have practically agreed upon those terms, there is likely to be some further delay in the adoption of this uniform bill.

A communication was received from the Secretary of the Winnipeg Jobbers' and Shippers' Association, asking in what way and by whom this Association would be represented before the Board of Railway Commissioners when this matter is taken up, and suggesting that their Association might arrange to engage the same counsel as we do, with a view to joint effort. The manager was requested to write him that it was most desirable that all interests should be united; so far the committee have not definitely decided upon engaging counsel; that we are strongly of the opinion that our action, as already advised, in filing objections to the conditions submitted by the railways was the only course open; that when the time comes to take action we should be a unit in demanding a clean bill, and should it be decided to engage counsel we will be glad to consult with them further.

The Grand Trunk Railway requested the publication of their circular in reference to the marking and addressing of package freight in INDUSTRIAL CANADA. Your Committee has much pleasure in recommending the same.

Mr. Henderson complimented the Committee on their good work in securing these orders from the Board, and testified to the value of the readjustment order to shippers situated at the frontier.

Mr. Louis Simpson also expressed approval of what had been done. He stated that he had been asked to call the attention of the Executive to the loose practices adopted by the railways in weighing shipments of lumber. The weighing appeared to be conducted under conditions which made it impossible to give satisfaction; besides which, he was informed, the checkers had instructions to increase the weights wherever they were found to be short, and to leave them unaltered when they were found to be excessive. Mr. Simpson accordingly moved, seconded by Mr. Cowan, that the whole subject of weighing shipments as conducted by the railways, whether of lumber or other commodities, be investigated by the Transportation Department, with a view to seeing if something could not be done to do away with the present unsatisfactory conditions.—Carried.

INSURANCE.

The report of the Insurance Committee was read by the Chairman, Mr. Burton. It announced the progress that had been made to date in securing business for the two new Mutual Fire Insurance Companies, and expressed the opinion that practically half the task which the Committee had imposed upon itself was accomplished.

It further reported that Mr. Dakers Cameron, by the kind permission of the Montreal Branch, would devote himself to canvassing for the Companies for the next few weeks, and also that arrangements had been made with Mr. W. I. Fenton, of St. John, N.B., to canvass the Maritime Provinces.

The report further recommended that the Manager of the Department be instructed to visit the Winnipeg Branch for the purpose of consulting members there regarding their insurance difficulties.

The adoption of the report, moved by Mr. Burton, seconded by Mr. P. W. Ellis, was carried.

RECEPTION AND MEMBERSHIP.

In the absence of the Chairman, the report of the Reception and Membership Committee was read by the Secretary.

It recommended for acceptance 15 applications, as follows:

NEW MEMBERS.

MONTREAL, QUE.

Klein Bros. & Co.
R. W. Oliver Milling Co.

TORONTO, ONT.

Martin Corrugated Paper & Box Co.
Berlin Electrical Mfg. Co.
London Machine Tool Co. (A. E. Juhler, 2nd member).
Stevenson Printing Co.
Western Leather Goods Co.

HAMILTON, ONT.

Ellis Manufacturing Co., Ltd.

SYDNEY, N.S.

Sydney Cement Co., Ltd.

WINDSOR, ONT.

Fox Bros. & Co., Ltd.

WELLAND, ONT.

Robertson Machinery Co.

FRANKFORD, ONT.

Trent River Paper Co., Ltd.

WINNIPEG, MAN.

Robb Engineering Co., Ltd. (J. F. Porter, 2nd member).

VICTORIA, B.C.

Staneland Paint Co.

SOREL, QUE.

St. Lawrence Saw and Steel Works.

BRITISH OFFICE.

Mr. Thos. Findley read the report of the British Office Committee, which reviewed among other things the correspondence which had passed between the Association and the Minister of the Interior with reference to the Association's protest against the Government's Immigration policy in the matter of skilled labor. The Committee reported their belief that nothing was to be gained by carrying the correspondence on any further, and that they would therefore recommend that the matter be dropped.

The report also referred to a communication from Louis Leopold, stating that it was impossible to arrange with the Shipping Companies to check luggage through to destination. The Committee, however, did not consider this a serious difficulty, as the only parties whom it was necessary to hold were those whose fares had been advanced, and these, so far as known to the Committee, had all gone through to destination, and commenced to repay their employers for the assistance given them in coming out.

Mr. Stone seconded the adoption of the report, which was carried.

Under the head of unfinished business the Secretary reported Mr. Robins' motion, of which notice had been given at the last meeting of the Council. Owing to Mr. Robins' absence, it was decided to allow the matter to stand over another month in order that he might be heard from on the subje[illegible].

BRANCHES.

The reports of the Toronto and Montreal Branches were received and ordered to be printed in INDUSTRIAL CANADA.

The meeting then adjourned.

MONTREAL BRANCH.

The first meeting of the newly elected Executive was held on July 11th, with an unusually large attendance of members present. At this meeting a large number of matters were taken up and discussed.

The Secretary reported that after fifteen months' h[illegible] work the Branch had succeeded in settling the difficulties b[illegible] tween the manufacturers of St. Henri and St. Cunegond Wards, and Ville St. Louis and Maisonneuve Wards, with the Montreal Water and Power Co. Accordingly the charge for automatic fire sprinklers had been reduced from 10 cents per annum to 5 cents per annum, and the fire hydrant rate wa fixed at $50 a year independent of the number of openings The result of this settlement was an annual saving of $1,3[illegible] for the fourteen firms interested, and the disposal of a que tion which has been annoying the manufacturers for ma years past. The total expenses were $434, which we assessed pro rata upon the members interested. The special thanks of the Committee were tendered to Ald. Roy and Ald Ward for their assistance towards obtaining this reduction.

A deputation from the Committee will wait upon the Quebec Government to urge better facilities in Montreal for the placing of labor in factories.

Another deputation will wait upon Hon. W. A. Weir in regard to the recent change in the Quebec Industrial Establishment Act, whereby the age limit of factory employees was raised. The deputation will urge that this change be not put into force until education is compulsory in the Province Quebec.

The lack of proper cartage facilities in Montreal was considered at length, and a special Committee was appointed to deal with the matter.

Nomination of twenty-nine representatives to the Executive Council were made, and the appointment of the Branch Finance Committee and the Branch Legislation Committee.

Two membership applications were recommended for acceptance.

Our Commercial Agent in Newfoundland.

Attention is again drawn to the fact that Canada has a Commercial Agent in Newfoundland. Mr. E. D. Arnaud is showing commendable enterprise in furthering the interests of Canadian merchants in that country. His reports to the Department of Trade and Commerce show a keen appreciation of the market, which is opening up in the ancient colony, and which lies open particularly to this country.

Exporters or their agents, when visiting Newfoundland, should call on Mr. Arnaud. His offices are in the *Gazette* Building, St. John's, Nfld., and are open to all business men. Moreover, through his sojourn in the island, he has become familiar with the needs of the people, and so can be of great assistance in developing trade. He will gladly supply any desired information on the subject, either by letter or personally.

ANNUAL MEETING OF MONTREAL BRANCH.

THE Seventh Annual Meeting of the Montreal Branch, Canadian Manufacturers' Association, was held in the Reading Room of the Montreal Board of Trade on June 7th, with the Chairman, Mr. J. S. N. Dougall, presiding.

The report of the Executive Committee for the year was read by the Montreal Secretary, Mr. Dakers Cameron, and unanimously adopted.

Report of Executive Committee.

To the Members of the Montreal Branch, Canadian Manufacturers' Association:

Your Executive Committee have pleasure in submitting their annual report upon the work of the Montreal Branch during the year, and a statement of some of the principal matters which have engaged their attention.

Change of Annual Meeting.

The holding of the Annual Meeting of the Montreal Branch in midsummer has proved inconvenient on account of the difficulty in securing a representative attendance of members at that time. The Committee have therefore brought the meeting forward into June to accommodate those who would be out of town in July or August.

Municipal Affairs.

The expiry of the Montreal Light, Heat & Power Company franchise for gas supply has led to numerous efforts to make a new contract between the city and the Company, not only for gas but for electric light and power as well. In November a movement was set on foot to grant a 30 years' exclusive contract to the Company, in return for a small reduction in gas charges and electric light and power rates. Your Committee felt that there was no need at this time to combine gas and electric franchises, but that they should be kept entirely distinct. Action was taken reaffirming the resolution adopted by the Montreal Board of Trade, La Chambre de Commerce, and this Association in 1904 for the obtaining of an arbitration value for the gas plant, the purchase subject to ratification by the property holders of the city, and a vigorous protest was entered against any proposal to grant an exclusive monopoly of electric current. A month later what was known as the Payette offer for the extension of the gas and electric contracts for a period of 20 years was brought up, and with amendment passed the City Council. Your Committee felt justified in serving a notarial protest upon the City Council, pointing out that the granting of an exclusive monopoly in electricity would be contrary to the interests of Montreal manufacturers, and would place them in an unfair position as compared with manufacturers in other parts of the Dominion where electric power might be secured at much lower prices than those laid down in the proposed contract with the Montreal Light, Heat & Power Co.

So much public feeling was aroused by the Payette offer that the Citizens' Committee, assisted by this and other trade associations, petitioned the Quebec Government in February to put through a measure obliging all municipal councils to have ratified by the electors or by the Lieut.-Governor-in-Council all concessions for public utilities for a period of more than 10 years. The Provincial Government saw the seriousness of the Montreal situation, and in the last hours of the session put a measure through the Legislature on the lines indicated.

The work undertaken to secure a reduction in the charges made by the Montreal Water & Power Co. for water supplied to factory sprinkler systems has resulted in the rate being reduced from 10 cents per head to 5 cents per sprinkler head, which will mean a saving of many hundreds of dollars annally to the manufacturers of St. Henri, St. Cunegonde, Ville St. Louis and Maisonneuve.

Successful opposition was made at Quebec to the City's attempt to obtain permission to place a new $500 tax on Montreal meat-packing establishments. This industry has already to bear its full share of taxation, and it is gratifying to note that the tax has not been allowed.

Provincial Matters.

In accordance with the instructions given by the members at the last Annual Meeting of the Branch, the Executive Committee gave careful attention to the provisions of the Archambault Bill for Compensation of Workmen injured in accidents, and in this they were aided by a capable solicitor specially engaged for the purpose. This Bill and others of a similar nature were not considered at the last session of the Legislature on account of the Government's decision to appoint a Commission to investigate the whole subject. This Commission is now being formed, with Hon. W. A. Weir at its head, and we feel confident of its resulting in legislation that will be more equitable to both employer and employee.

The Quebec Law of Garnishment has been carefully considered by the Committee during the past year. Under this law serious loss of time and disturbance to business are caused employers, and often great burden and hardship have been brought about where wage earners have been sued for trifling amounts and have been involved in heavy costs, altogether out of proportion to the original amount.

The Committee felt that changes in the law were necessary, and a petition was prepared by their solicitor and presented to the Prime Minister of the Province, in February. It was then too late for anything to be done at that session, but we hope that substantial alterations will be made at the next sitting of the Legislature. The attention of the incoming Committee is called to this question, and a recommendation made that an interview be obtained with the Prime Minister of the Province on this subject at an early date.

Federal Legislation.

As usual, considerable attention was devoted to Federal legislation, and every assistance rendered to the Head Office in these matters. Deputations in regard to Technical Education and the two Mutual Fire Insurance Companies being organized by members of the Association, waited upon the Dominion Government.

Technical Education.

The generous offer of the Protestant School Commissioners to grant the use of the new Commercial and Technical High School for evening classes in manual training, has afforded a unique opportunity to the Montreal Technical Institute. An open evening on April 25th allowed the manufacturers and others to inspect the building, and it has since been decided to start technical classes next September. A guarantee fund of at least $10,000 is now being raised to cover any deficit that might be incurred in the work of the first year.

Montreal Branch.

Your Committee have pleasure in reporting an increase in the membership of the Montreal Branch and a marked gain in interest among the members. The decision of the Executive Council to hold occasional meetings in Montreal has met with much favor, and the first of these events, in January, resulted in a splendid attendance by local members, as well as the manufacturers of both East and West.

Two social events were held: a complimentary banquet to Mr. C. C. Ballantyne at the Canada Club in November, and

a dinner and smoker at the St. Lawrence Hall in April, both of which were largely attended.

The Paint and Varnish, and the Gold and Silversmiths' Sections have had a successful year, with several well attended meetings.

The Chairman then delivered his annual address.

The report of the Finance Committee was presented by Mr. Geo. Esplin, and unanimously adopted.

Mr. Dougall then announced that in the annual elections Mr. S. W. Ewing had been chosen Chairman, and Mr. S. S. Boxer Vice-Chairman, for the coming year, both by acclamation. Mr. Dougall then retired from the chair in favor of Mr. Ewing, who thanked the members for the honor conferred in electing him to this important office.

On motion of Mr. C. C. Ballantyne, seconded by Mr. A. Ramsay, Mr. D. Lorne McGibbon, of the Canadian Rubber Co., of Montreal, Ltd., was unanimously nominated for Quebec Vice-President of the Association for the coming year.

An enthusiastic resolution was passed inviting the Association to hold its Annual Convention of 1908 in Montreal, and Hon. J. D. Rolland was asked to convey this resolution to the Toronto Convention.

Among the matters which were discussed at the meeting and referred to the Executive Committee for consideration were, the establishment of a local labor bureau in Montreal, the recent increase in the age limit of factory boys and girls, and the lack of cartage facilities in Montreal.

The meeting then adjourned until the following day to receive the report of the scrutineers upon the election.

The report showed that the following 18 members had been elected to the Montreal Executive Committee to represent Montreal city and suburbs:

C. P. Bingham, The Major Manufacturing Co.; Fred. Birks, Belding, Paul & Co., Ltd.; J. H. Birks, Henry Birks & Sons, Ltd.; A. H. Brittain, Atlantic Fish Companies, Ltd.; S. D. Joubert, Lamontagne, Ltd.; J. R. Kinghorn, Montreal Rolling Mills; L. H. Packard, L. H. Packard Co., Ltd.; Geo. W. Sadler, Sadler & Haworth; William Cauldwell, Canada Paper Co., Ltd.; C. W. Davis, The Williams Mfg. Co.; Geo. Esplin, G. & J. Esplin; Jos. Fortier; Robt. Gardner, R. Gardner & Son; J. H. Sherrard, Alaska Feather & Down Co.; Chas. A. Smart, Smart Bag Co., Ltd; Clarence F. Smith, Jas. McCready Co., Ltd.; W. T. Whitehead, Mount Royal Spinning Co.; R. J. Younge, Canadian Rubber Co., Ltd.

Mr. Louis Simpson, of Valleyfield, and Mr. S. T. Duclos, of St. Hyacinthe, were elected by acclamation to represent the members of the Branch outside Montreal city.

ANNUAL MEETING OF THE TORONTO BRANCH.

The seventh annual meeting of the Toronto Branch was held in the Bank Board Room, Traders' Bank Building, on Thursday, July 11th, at 2 p.m.

Mr. John Firstbrook, Chairman, presided, and there were also present Messrs. Ed. J. Freyseng, J. P. Murray, W. K. McNaught, Frank Rolph, C. M. Murray, S. H. Chapman, Geo. B. Meadows, G. A. Howell, J. S. McKinnon, A. C. Knight, Wm. Stone, D. T. McIntosh, Geo. M. Rose, Frank Stanley, S. Harris, Robt. Greig, J. O. Thorn, E. C. Boeckh, W. B. Tindall, H. T. Stanton, Geo. Gillies, J. F. Ellis, A. Burton, J. T. Sheridan, and others.

The Secretary, Mr. H. D. Scully, presented his report and financial statement, showing that the past year had been an exceptionally busy one for the Branch in every way. Membership showed an increase of thirty-one for the year, and attendance at committee meetings was the best in the Branch's history.

The report of the Executive Committee, reviewing the year's work, was then read by Mr. Ed. J. Freyseng, the retiring Vice-Chairman, as follows:

Your Executive Committee have pleasure in reporting the work of an exceptionally busy year, in which great success has attended the efforts of the Branch in all matters taken up. In number of meetings held, the past year broke all records. Thirteen meetings of your Executive, including three special meetings, have been held, with an average attendance of ten. All problems affecting the Branch at large have been carefully considered, and action taken in what seemed the best interests of the members individually and collectively.

Smoke By-law.

Your Executive continued throughout the year to give thought to the subject of the Smoke By-law. Following in the steps of the last Executive it conferred several times with Property Commissioner Harris, through a special sub-committee, and at last succeeded in working out a by-law which is mutually beneficial to manufacturers and the general public. This by-law was ratified by the Ontario Legislature at its last session and took effect immediately. It provides a penalty both for the manufacturer and his fireman, where it is conclusively shown that the emission of dense smoke for more than six minutes in any one hour is due to the negligence of either. Its successful enforcement will not only insure competent strokers and effect a saving in the manufacturers' fuel bill, but will confer a great boon on a long-suffering public. Your Executive have always given Mr. Harris their cordial co-operation in this matter, and are anxious to see the law enforced where negligence is shown.

Cheap Electric Power.

Perhaps the question of greatest importance dealt with by your Executive last year was the Niagara Falls power distribution problem. This question has been continually before the public for the past few years, and is of vital concern to manufacturers and every other class in the community. Your Executive, feeling that cheap power was the greatest consideration, fought consistently on behalf of these measures which would insure a plentiful supply of cheap power. At one stage, when the situation was particularly acute last March, a special meeting of the Executive passed a resolution endorsing the city's efforts to secure cheap power, and it is now assured that the citizens of Toronto will reap the full benefits of cheap Niagara power. Your Executive has conferred with the city officials on three different occasions regarding the best means of procuring reliable statistics of the power needs of Toronto manufacturers, and as a result up-to-date figures are now on file at the City Hall, which will enable the manufacturers of Toronto to obtain the full advantage of Niagara power as soon as it can be delivered here. This question is still before the public in another form, and we urge the incoming Executive to closely watch it.

Workmen's Homes.

Seized with the necessity of providing moderate priced homes for artisans, if Toronto is ever going to have a good supply of contented workmen for her industries, your Committee early in the year began to consider steps which would insure the erection of a large number of such homes. In November a special committee was appointed, which, under the able chairmanship of Mr. Thomas Roden, in less than a month, reported a comprehensive scheme for the building of 1,000 houses by a company formed of manufacturers in the city. You are all familiar with the details of this plan, and it will be unnecessary for me to go into them here. After careful investigation as to the feasibility of the plan, the project was launched at a very successful dinner held at McConkey's. It won commendation on every hand, and organi-

zation has been cautiously proceeded with ever since. The excessive stringency of the money market has somewhat retarded the accomplishment of the designs of the Committee, and restrained many manufacturers from tying up capital which is required in the expansion of their own businesses. But steady progress is being made, and the project will not only help solve the house problem of itself, but has attracted attention to the great scarcity of moderate priced houses, and resulted in the erection of many hundred houses of this class by private companies and individuals.

The credit which the Branch has gained in taking up this big question is almost entirely due to the tireless efforts of Mr. Thomas Roden, who, as Chairman of the Committee, has labored incessantly towards its successful consummation.

Harbor Improvement.

Another big civic problem attacked by your Executive is the question of general harbor and lake front improvement. This question has been before the people of Toronto for over a generation. Feeling that what was needed was one large, comprehensive plan for the solution of all phases of the water-front problem, including Ashbridge's Bay improvement, your Executive appointed a special sub-committee, who went thoroughly into the whole question. This was after the return of the Toronto deputation, which went to Ottawa regarding harbor improvement, and which exhibited such fatal disunion in presenting its case there. This sub-committee, after due deliberation, concluded that the only way to insure permanent improvements in the harbor situation, on a large scale, such as is required by this great commercial centre, was to submit a single plan, endorsed by all the local organizations interested. It, therefore, conferred with all these bodies. The result was a deputation to the City Council recommending the creation of a Commission of three members, representing the city, the Dominion and Ontario Governments, respectively, to deal with this question as the situation demanded. The City Council have given the proposal favorable consideration, and lately appointed a Civic Committee to confer with the organizations represented about this plan and measures which would make for a "Bigger Toronto." Your Committee will be represented at the first meeting of this Committee, and trusts that something permanent will really be done for Toronto harbor at last.

Toronto Improvement Association.

During the year the Branch was approached regarding the organization of the Toronto Improvement Association, which aims at promoting the general development of the city, and the raising of municipal politics to a higher plane, thus securing the election of better men to the Council. Your Executive passed a resolution approving of the aims and objects of this Association. The new Association will have a material influence in the welfare of our city, and will render effective service at the time of the next municipal election.

Ashbridge's Bay.

In December your Executive passed a resolution in favor of a progressive policy of municipal ownership in the Ashbridge's Bay district, and recommending that the locality be reserved for manufacturing sites, which should be leased, but not sold, by the city. The policy pursued by the city, with regard to Ashbridge's Bay since then, has been in accord with the lines of this resolution.

Other Questions.

In addition to the foregoing matters of particular concern to the Branch, the Executive brought the following questions to the attention of the Executive Council, their suggestions being acted on in each case by the Council :

1. The question of child labor and the agitation to have the child labor regulations made more stringent.

2. The Bureau of Labor circular requesting manufacturers to answer a series of twenty questions intimately concerning their business. The Branch recommended the sending out of a circular informing the Ontario members that answers to these questions were not compulsory.

3. The Executive carried on investigations showing the extent of the dearth of female labor in Ontario, and particularly in Toronto. The figures are truly startling, and will be referred to in the Chairman's address. Your Executive is now conferring with the Salvation Army with a view of bringing out a supply of girls for Canadian factories.

Convention Arrangements.

As you all know, the Toronto Branch have the honor of being hosts for the Annual Convention this year, and preparations have now been going on for some time. The members are loyally co-operating with the sub-committees, and a rousing convention is assured. Every Branch member is expected to take a week off during convention to see that our guests have a good time. An attractive programme is arranged already, and the day following the convention an excursion will be run to Niagara Falls.

The Branch has invited the American Foundrymen's Association to hold their next convention in Toronto in June, 1908, and has been informed that they will do so.

Other matters to receive consideration during the year were :

1. The location and equipment of the new Technical High School.

2. The arrangement of monthly luncheons.

3. Toronto Exhibition matters.

No resignations were received from the Executive during the year, and only one member failed to attend a meeting. All the others were most faithful in their attendance.

REPORTS OF OTHER COMMITTEES.

The following reports were also read: From the Industrial Exhibition Committee by Mr. W. K. McNaught, from the Technical Education Committee, by Mr. J. P. Murray, and from the Dinner Committee, by Mr. J. S. McKinnon. All were adopted. Mr. John Firstbrook then read his annual address, which was a very comprehensive review of industrial conditions in Canada, and particularly in Toronto. Several resolutions were also adopted, including one to extend the jurisdiction of the Toronto Branch over Toronto suburbs, such as Toronto Junction, Mimico, etc. Other resolutions adopted concerned Association administration, and will be dealt with finally elsewhere.

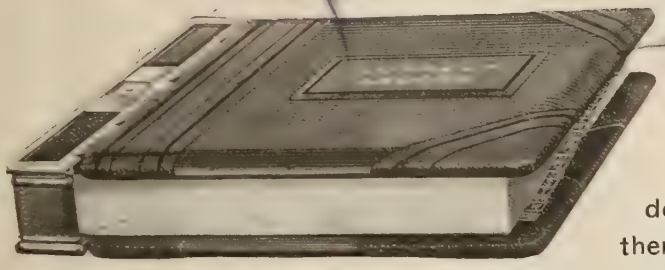
The approximate horse-power of gas engines may be calculated by empirical rules formulated by Dugald Clerk, the eminent British authority. He uses two rules, one for engines not exceeding 12 h.p., and the other for larger engines. In both formulas, D represents the diameter of the cylinder in inches, and N the number of cylinders. The mean effective pressure and the piston speed being about constant, are taken care of in the constants used in the expressions. For the smaller type the formula is

$$\text{Horsepower} = \frac{D^2 \times N}{3},$$

while the larger type uses the same formula, but the constant becomes 2.4 instead of 3, as used in the denominator. The mean effective pressure in each case is assumed to be 70 lbs. per square inch, while the piston speed is 800 ft. per minute for the smaller engine, and 1,000 ft. for the larger.

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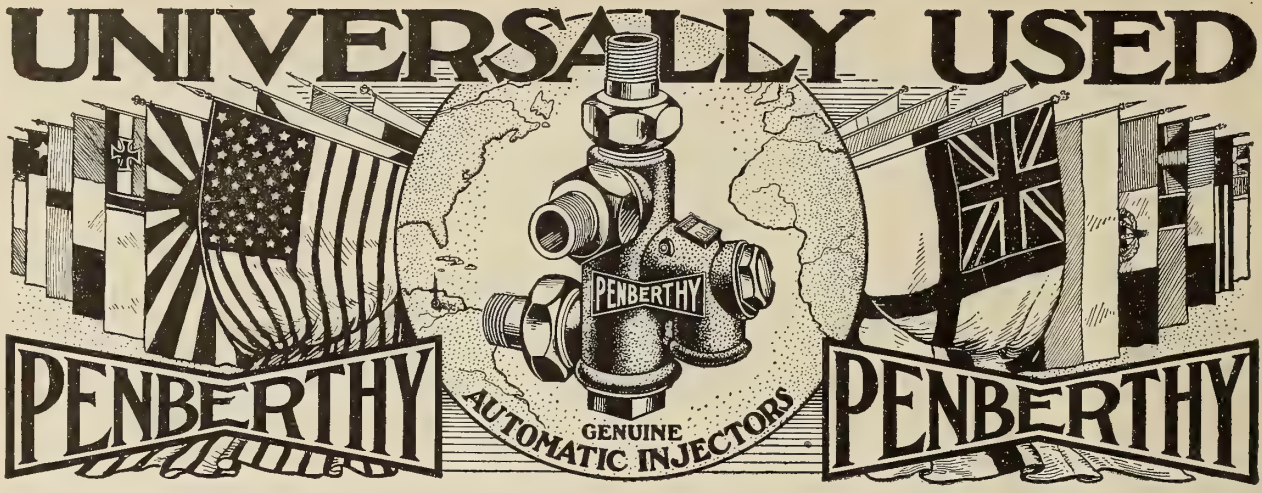
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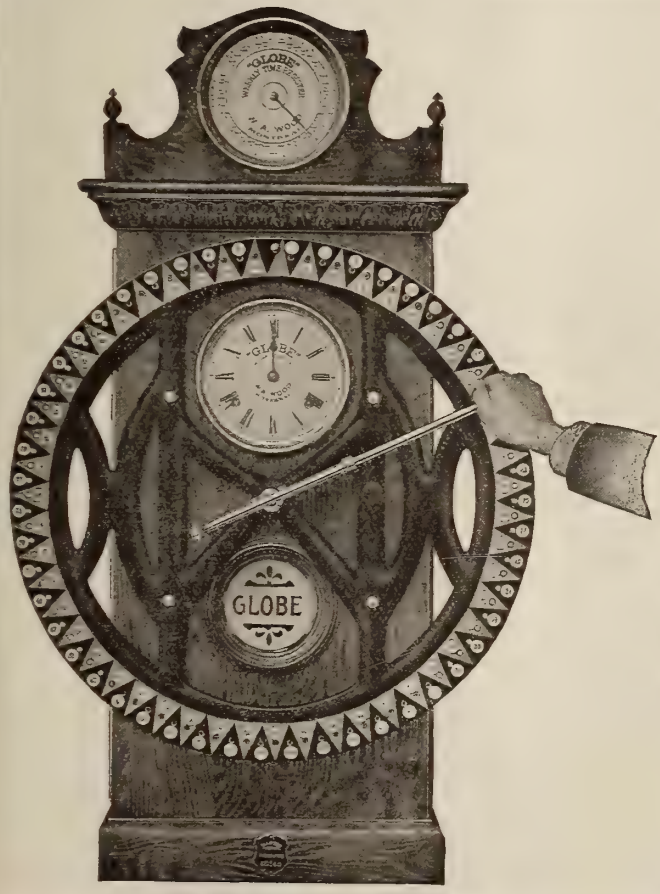
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E. W. HICKSON, Toronto, Ont.
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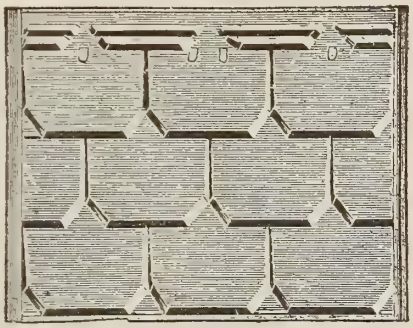
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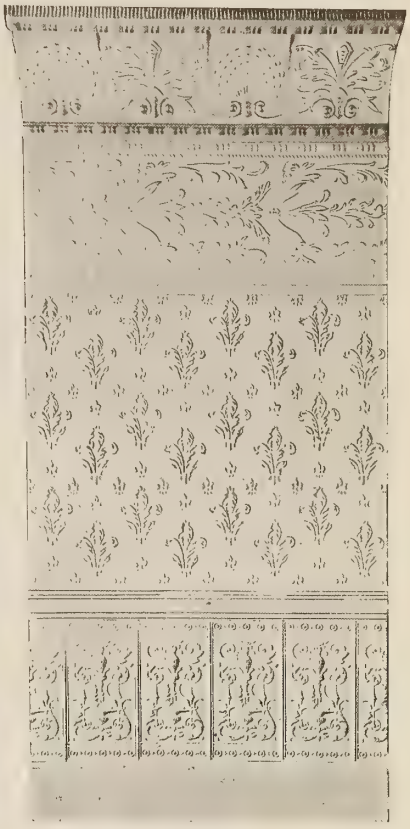
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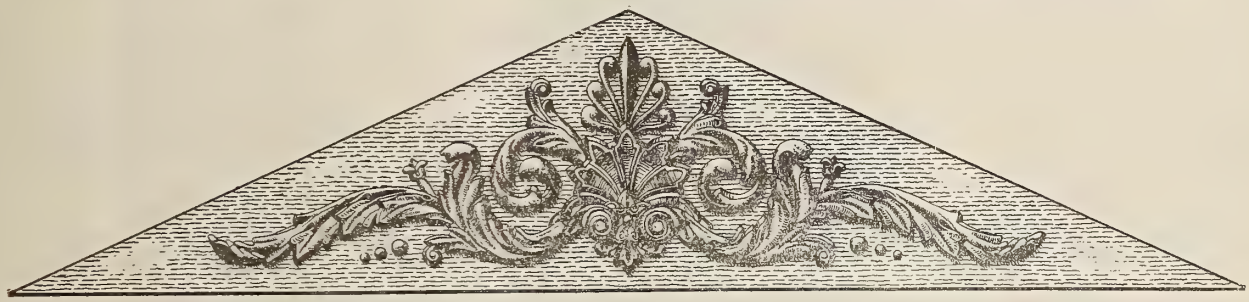
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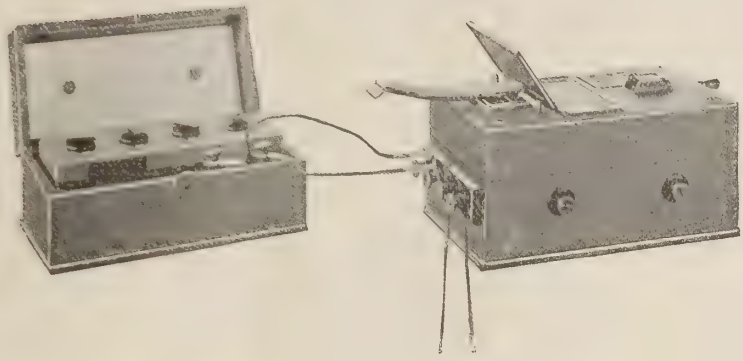
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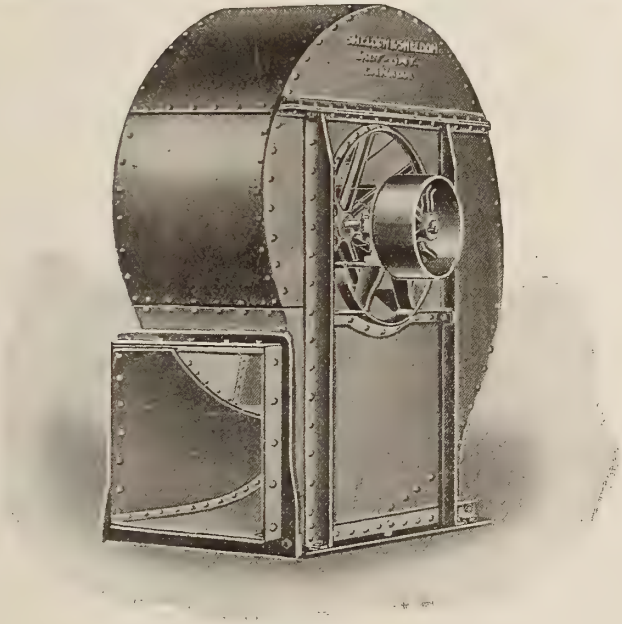
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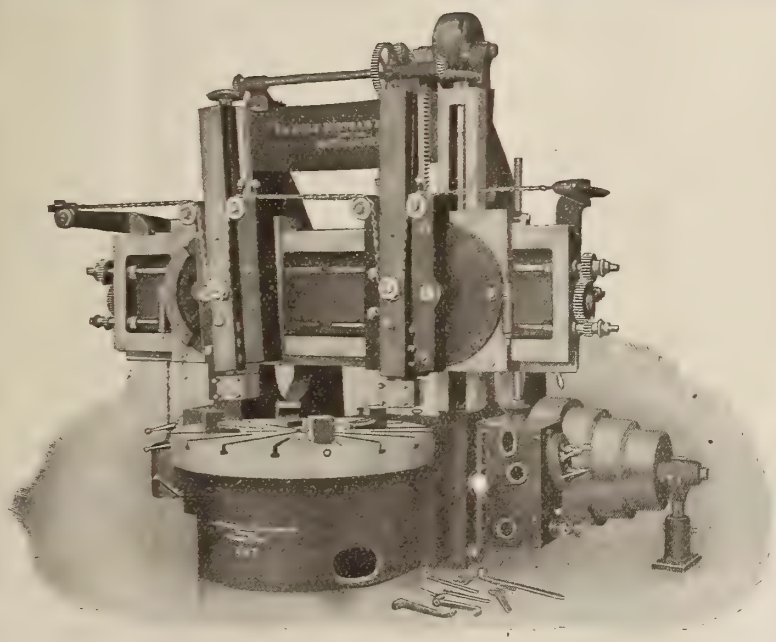
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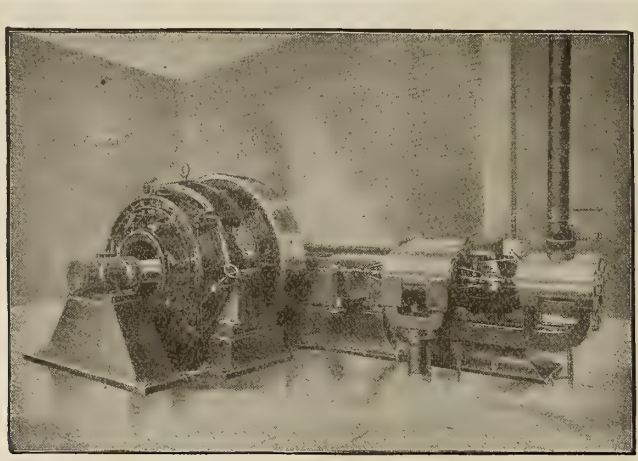
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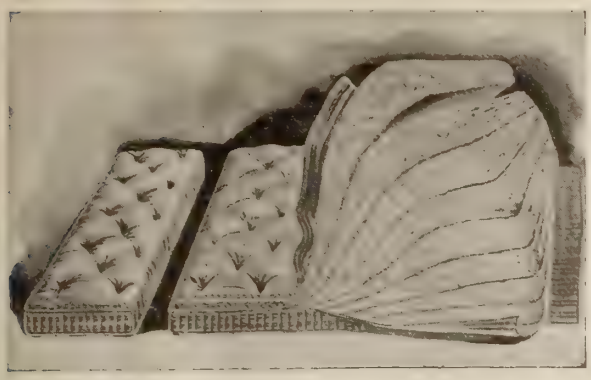
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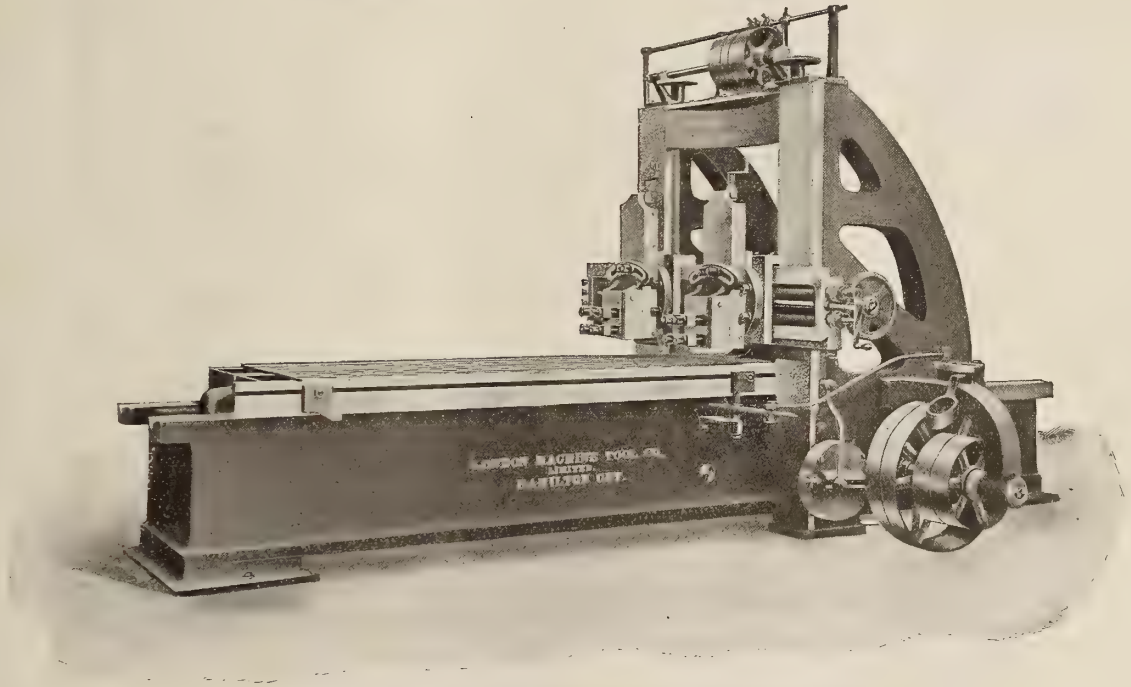
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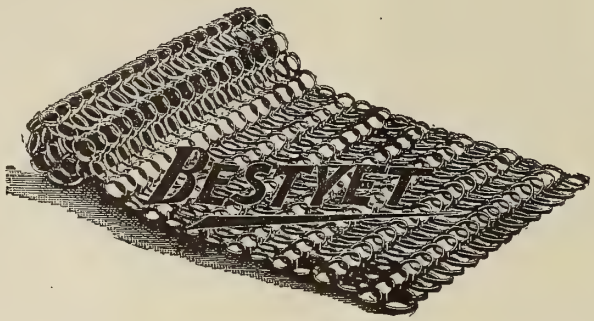
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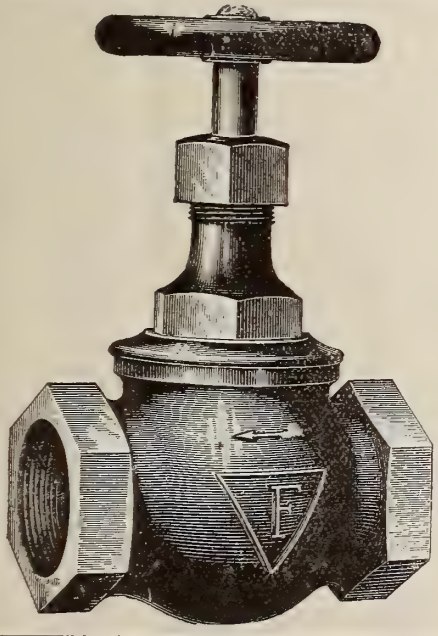
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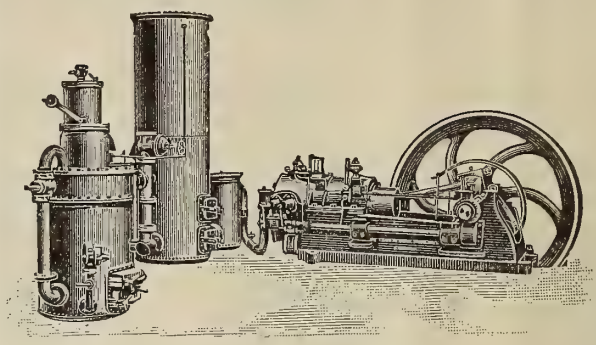
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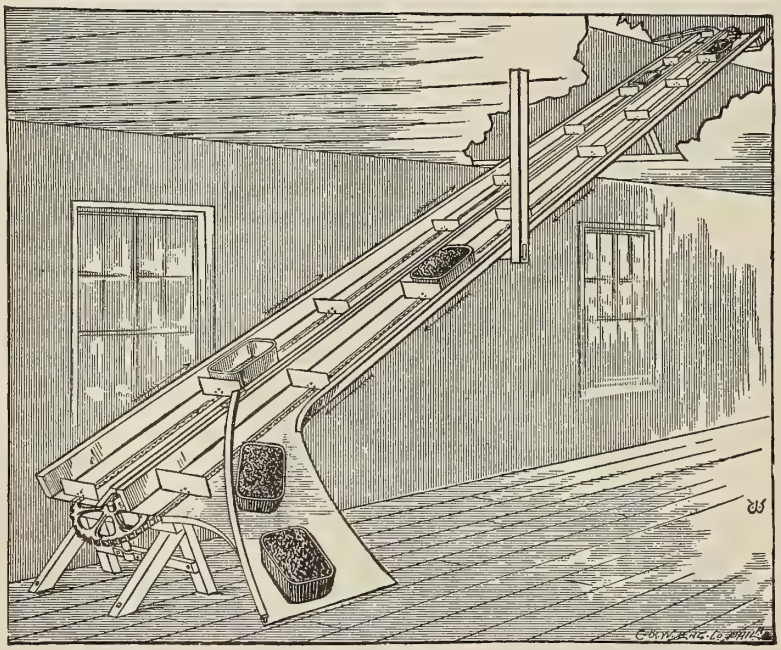
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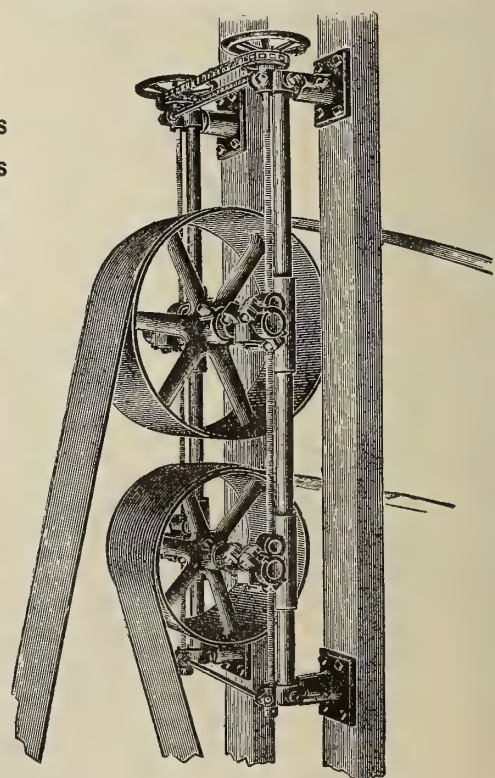
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There be three things which make a nation great and prosperous: A fertile soil, busy workshops and easy conveyance for man and goods from place to place."—Bacon.

Vol. VIII. TORONTO, SEPTEMBER 1907 No. 2

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

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CANADA'S POPULATION.

OUR population through immigration has again shown a large increase. Almost without our knowledge we are becoming a big people. For the twelve months ending June 30th, 1907, the Government returns show the total immigration to have been 252,038. For the same period in the preceding year the number was 189,064. The gain this year was 33 per cent.

Over a quarter of a million new citizens through immigration alone is a big item when we consider that our total population is only six and a half millions. The million and a quarter that the United States receive do not look so many when compared with the eighty million that they already have. The tide of emigration is turned Canadawards, and unless some unforeseen accident occurs, we may expect to see this number grow from year to year.

We have land and opportunities to satisfy all that come. The strip of land lying on each side of the C. P. R. was formerly considered to comprise all the wheat lands of the West. The Canadian Northern ran its line farther north and there were still fertile lands. The G.T.P. goes still farther north and the same report is received. What was formerly a slender belt across the prairies has expanded into a mighty empire waiting but development to yield harvests beyond the imagination of our fathers. There is room there for millions of settlers, where there are now thousands. Only a fraction of the land is under cultivation.

There are opportunities here for the artisan no less than for the agriculturalist. While in the West homesteads are awaiting the farmer, with a soil that requires no clearing to turn it into agricultural land, in the East factories are eagerly looking for workmen. Canada must have skilled workmen if she is to take her place in the world's industrial race.

Natural advantages are present, such as few countries enjoy. But the workshops must be manned if the work is to be done. Hitherto this phase of the immigration question has been deliberately shunned by the Government. It is just as necessary as the filling up of our farm lands. The crying need of Canada during the past year has been more skilled workmen.

A discussion of our immigration brings up the subject of the present agitation in British Columbia against the admission of Japanese. We have one advantage, at least, in seeking a solution of the problem. We have an example before our eyes, in the case of the United States, of the admission of a race which cannot be assimilated. Moreover, the Asiatics have been invading the United States for many years, so that the effect of their presence should be now fairly well marked. The quality of our citizens is of first importance. Numbers are of importance, but in any case it is just a question of time with them. But the character of our people is being formed now. If the nation is to be strong in the things that make a people great, the foundation must be laid now.

WILL THERE BE SUFFICIENT CARS?

IT is indeed pleasant to hear that there will be no car famine in Canada this autumn. It is probably because a report of this kind gives such general satisfaction that it is so oft repeated. We have distinct recollections of a similar statement appearing in 1905, and in spite of the almost incredibility of the story it was received with widespread applause. It is true there followed a serious tie-up in business, so severe that millions of bushels of grain were left in the West over winter which should have been marketed in the autumn, and even at that there were no cars to handle Eastern business; but the unprecedented prosperity, the unexpected volume of business offering, swamped the roads. They could not be expected to foresee anything of the kind. The railway managers themselves admitted it.

Then last year we heard the same story. The prosperity had continued. The volume of business was steadily increasing. The railways with the memory of the previous season's shortcomings fresh in their mind, had made adequate preparations. In 1906 there would be no repetition of the conditions that prevailed in 1905. The pleasant tidings went forth that the

mileage had increased and that rolling stock would be on hand. They would be able to give a satisfactory service, with their increased facilities. There would be no congestion.

Even the most optimistic will be forced to admit that the expectations of the public fell somewhat short of fulfilment. The harvest was excessive; the winter was severe. There may have been other equally satisfactory reasons. However, the predictions of the railways that conditions would not be as they were in the previous year, were made good. Conditions were not the same ; they were infinitely worse. Perhaps after all that is what the managers meant.

So this year we are pleased to have the old story revived. It has become like an old friend ; we would feel lost without it. All the lines are in better condition and more adequately equipped. We can hardly say we feel any great confidence in the outcome, unless the crop is so short that the demand for cars will be small. But it will be interesting to learn what the excuse will be this year.

The one sure thing about the situation is the urgent need of good quick service. This applies this year more than it has before. The demand for money is so pressing, not only in the industrial, but even in the civic world, that the tie-up of a large amount of capital by the crop being left in the West over winter would be little less than disastrous. The storekeepers and banks in the West are dependent on the returns from the year's harvest. If this fails to come in the autumn, the wholesale dealers and manufacturers in turn feel the pinch. This year the banks are so curtailing their credit that manufacturers and wholesalers must get returns from their sales; otherwise they will not have the capital to carry on their businesses. The public will look for a heroic effort on the part of the railways. In the meantime it is owing to the shipping public that a straightforward statement be issued by the railways. Much of the trouble of previous years could have been averted if the public had known in advance just what to expect. The companies should know by this time how they are fixed to handle the season's business.

A SCHOOL FOR APPRENTICES

IN the State of Illinois there is a law which provides that wherever a municipality establishes a trade school for apprentices it shall be compulsory on all master tradesmen to send their apprentices to these schools for three months each year, such time to be counted in as part of the term of apprenticeship. This scheme of compulsory industrial education is being worked out in a limited sphere at the present time in Chicago. One school is specially provided for the purpose and the master bricklayers, stonemasons, and carpenters have united to carry out the principle of the State law. The conditions are stated in the form of indenture, which a boy must sign before entering on an apprenticeship in any of these trades. He shall attend school for three months each year, during which time he will be paid the regular apprentice's wages. If he absents himself, the time thus lost is added to the time of his service. A certain bonus is paid at the end of his apprenticeship if his work has been satisfactory.

At this school trades are not taught. The curriculum is entirely subsidiary to the practical training of the boy's apprenticeship. The course of instruction, of necessity, is elastic, since some boys come in with only a smattering of the English language, while others are graduates of high schools. But if the main idea is kept clearly in view, there is no trouble. To the boy learning carpentering, a course in mathematics, such as will be of practical use in his trade, is given; mechanical drawing is an important subject; designing and estimating costs are taken up. For apprentices in other trades such changes are made in the course as will make it of most value to the student.

In a recent special report to the Superintendent of Schools, the following suggestions were made for a construction course in an apprentice school. This would be in addition to the regular classes in English, etc. The course here outlined would be in the nature of applied theory work—laboratory work in which the apprentice would make model buildings, studying why various things were done, and doing them because they were the best means of accomplishing a certain result, not merely because someone had done the like before.

For Carpenters' apprentices:

1. Make in wood-shop model cottages, barns or other frame buildings to a scale, showing foundation beams, framing doors and sides, partitions, roof constructions, sheathing, lathing and shingling, window frames, bay windows, doors inside and out.
2. Make working drawings, write out the specifications, and compute the cost of labor and material used in No. 1.
3. Study and construct in detail for both brick and frame building window frames, outside door frames, porches, dormers.
4. Practice on inside finishing work, casings, wainscoting, mop boards, paneling, grounds, corner heads, mouldings, beams, columns.

For Masons' apprentices:

1. Study different types of foundations on firm soils and on compressible soils.

   Make drawings and scale models of foundations used under light and under heavy buildings. Footings, center of pressure, piles, grillage, concrete, masonry walls, caissons, off sets, inverted arches, retaining walls, vault walls, door and window spaces.

2. Laboratory work on:

   Lime—characteristics, slacking and mixing; sands used for masonry—compositions; white and colored mortars; hydraulic limes; kinds of cement—analysis, testing, strength; cement mortars; effect of heat and cold upon fresh and set mortars; concrete—use in modern foundations and constructions, mixing, proportions, testing strength of different mixtures.

3. Study common types of building stones as to use, strength, durability, composition, etc.

For Bricklayers' apprentices:

1. Working drawings, blue prints, perspectives, and scale models of dwellings, and large buildings, which are representative of the typical styles of brick work. American Bond. English Bond. Flemish Bond. Brick Veneering Construction. Architectural Terra Cotta.

2. In the class-room, give practice in writing out specifications and contracts, and compute the cost of material and labor as used in No. 1.

3. Laboratory work:

   Bricks—composition, manufacture, glazed and enameled, paving, fire brick, colored pressed brick. Lime, Cement, Mortar, Sand. Thickness of mortar joints—effect of cold and heat. Wetting brick, efflorescence. Damp proofing. Crushing strength of brickwork.

There can be no doubt about the efficacy of such a school. The boy who carries along a theoretical and scientific study parallel with his practical work is going to be the superior in skill, efficiency, and resourcefulness, of him who just

works by rote, blindly following the lead of his master. This is a phase of the bigger subject of industrial education, which Canada must face at once. We have entered the industrial race. In this we shall have as competitors the most highly-trained workmen of other countries. How are we going to meet that competition?

THE TORONTO EXHIBITION.

DURING the next two weeks the Toronto Exhibition will be in progress. Through its agency the buying and selling public are brought together in a manner which must prove of inestimable benefit to both parties. It is as necessary for the producer to hear the criticisms of his goods from the consumer's standpoint as it is for the consumer to hear the points of superiority from the producer. A personal comparison and inspection serve a good purpose.

The Exhibition in Toronto is national in every respect. The exhibits each year show an increasing wealth of production and variety of form. Working up from the raw materials the successive stages of manufacture are amazing in their diversity. Products of the farm vie with those of the factory alike in excellence and interest. The most optimistic statements of emigration agents are proved to be prosaic half truths by the prize pumpkins and melons of fabulous size which everywhere meet the eye. Again in the process building the actual making of goods is in progress. Industrial life has developed into a series of fine specializations. How much this is so is scarcely appreciated by the average consumer. The process of manufacture is rightly considered one of the most interesting features of the big show.

Each year new buildings meet the eye. That the Exhibition Association has been able to keep up the interest throughout the country so steadily is most creditable to it, and is in itself a sufficient proof that the directors have been working along the right lines. It is one of the institutions which depends for success absolutely on itself. So long as it progresses, increasing its usefulness and adding to its attractiveness, it will be supported. It is now undoubtedly the biggest and most complete annual exhibition on the continent. And it is growing.

THANKSGIVING DAY ON MONDAY.

A SUGGESTION which was made some years ago has been crystallized into definite form by the official action of the Commercial Travellers' Association and the Canadian Manufacturers' Association. Thanksgiving Day, since its inception, has been celebrated on a Thursday. It doesn't seem to have mattered much what week or month it fell in, but the day of the week was all important. The precedent was of so long standing that no one ever thought of suggesting a change, in spite of the obvious disadvantages of the day, until those iconoclasts, the commercial travellers, entered a protest. The travellers will never stick at effecting a reform through any undue modesty or conservatism. So an agitation in favor of a Monday Thanksgiving Day was commenced.

A holiday in the middle of the week is certainly objectionable. It disorganizes business. In a large factory its effects are felt for some time. It takes a little while at the beginning of the week to get things running smoothly and to the best advantage. If the same preliminary work has to be gone through with again on Friday a serious break in the output results. Commercial travellers feel the mid-week holiday particularly. They lose the holiday themselves, they can accomplish no work on that day, and usually the merchant is too busy the following day to give them consideration. And it may be said fairly that what hurts the traveller hurts the merchant. Then to the great mass of work people a holiday on Monday is much more valuable ; from Saturday noon till Tuesday gives a good resting period.

For these reasons the two associations will urge the Government to change the day this year. The request will undoubtedly be acceded to. To many people the change will make no difference. To the majority it will be gladly welcomed. No class will be adversely affected.

FIRE PROTECTION.

SOME public utilities, by common consent, have been taken over by municipalities to be managed by the councils in the common interests. Of these none is more important than the water supply. The need of abundance of water is so generally appreciated that it is felt that it should not be left to any private company to supply. In spite of this the inadequacy of the supply is a public scandal in a number of Canadian cities. Such a condition of affairs cannot be ascribed to any other cause than short-sightedness on the part of those who have been elected to office. It frequently happens that members of councils, while they are capable of administering the ordinary affairs of their municipalities, are quite unfit to cope with the bigger problems which present themselves from time to time for settlement.

The seriousness of the situation is being shown at the present time by the drastic measures which are being taken by the insurance companies in Montreal. The fire protection has become so impaired through a shortage of water that risks are being generally refused in some districts, and a suggestion of another increase in rates is heard. This would have a serious effect on the industrial growth of the city. Already the cost of insurance is abnormally high, much higher than the public should be called upon to pay. How much this is caused by an inordinate greed for profits on the part of the companies, and how much by the inefficiency of the water service, is difficult to determine. Certain it is, that if the fire protection were adequate, policies would not be allowed to lapse at a time when the companies are making such an energetic canvas for business in other places.

It simply means that aldermen in the past have not had imagination enough to foresee the growth of the city, nor have they had courage enough to spend money when an expenditure would be a real economy. Montreal is not the only city which has suffered from having aldermen who were not big enough for their job. Municipalities in Ontario and elsewhere are similarly afflicted.

Inefficiency is always expensive. If through lack of those statesmanlike qualities which are required in building for the future, public works are put off, the cost of repairing the defect will, each year, become greater. Those municipalities which are wrestling with water-front difficulties, or level crossing problems, appreciate this fact. It is false economy to save the cost of a proper water-works system, and have the whole citizen body bled annually by fire insurance companies.

The solution of the trouble is not hard to suggest. The carrying out of the remedy seems to present greater difficulties. If business men were put in charge of the civic government, we might fairly expect to have the civic affairs administered in a businesslike manner. Hitherto men of ability have, for various reasons, generally refrained from taking an active part in public affairs. They simply cannot afford to continue this policy. It will devolve upon the business men, including the manufacturers, to get good, competent men in the field and elect them. Only in this way will they insure good government.

THE CONVENTION.

AS the time for the annual meeting of the Canadian Manufacturers' Association approaches the interest in it grows greater. Every day brings in reports of more members who will be in Toronto for its sessions. This is but natural. During the past year many subjects of the greatest importance to manufacturers have been up for settlement. All these will be treated of in the reports of the various committees which have been working on them for the twelve months just closed.

The standing committees of the Association are doing a great work for the members. A small body of men, devoting their special attention to one line of work, can accomplish most effective results. They are ready to strike when the time is most opportune. In this way are the interests of the whole Association served throughout the entire year.

The discussions which arise out of these reports will be intensely interesting. That is where the policy of the Association is made. In no other place is such a breadth of view possible. Those present will represent every part of Canada from ocean to ocean. Members will be here from the Maritime Provinces and from British Columbia, from Quebec and Ontario, and from the Middle West. There can be no narrowness or provincialism in such a gathering.

A new feature of the business sessions this year will be a number of good strong business addresses, by men who are pre-eminent in their own sphere on this continent. Those who have heard Mr. James E. Emery, of the Citizens Industrial League of New York, will appreciate what a treat an address from him will be. Besides him there will be a number of others, whom the members will be equally glad to hear.

The Toronto Branch has prepared a busy programme of entertainment for the three days of the Convention. There will be no dearth of attractions. For the ladies of the party every effort has been made to ensure a pleasant outing. The Vice-regal reception in the beautiful grounds of Government House; the jaunt to Lambton Club; the Theatre Party at the Royal Alexandra; the automobile trip around Toronto's beautiful avenues; all these will combine to make the Convention memorable. Then there will be an excursion to Niagara by way of Hamilton, with a tour of some of the leading manufacturing plants of the latter city, and an instructive view of the development work at the Falls. Finally, there will be the Banquet, which has become one of the most enjoyable features of the annual meeting.

Toronto looks its best in the Autumn. Under the guidance of the members of the Toronto Branch every visitor will have ample opportunity of viewing the city, and enjoying its beauties and attractions. It is confidently expected that every member who can possibly be present will attend.

HIGH RATE OF WAGES.

THE unrest among workmen, which has been more or less general all year, is prejudicial to the best interests of all classes. It is not justified by the recent census reports showing the increase in wages paid during 1901 and 1906. In that period the total wages paid to workmen in Canada increased about 45 per cent. The average increase per man was 27 per cent. This in itself is a very liberal increase in a five year period. It is not, however, a complete statement of the situation. During the same period the hours of labor were reduced in many lines of industry. In a number of cases eight hours were substituted for nine as a full day's work. In several others the reduction was made from ten to nine. This in itself makes the increase for the time worked very much greater than appears in the 27 per cent. If a man gets as much for eight hours as he formerly got for nine, his wages have been increased eleven per cent. In such cases this must be added to the 27 per cent. in showing the improved condition of the workingman.

Moreover, with the shortage of labor which has existed for a considerable time, a shortening of hours means a large positive increase. The shops are busy and the work must be turned out. It is impossible to increase the staff to make up for the loss of production through the decrease in the hours of labor. Hence the men must be kept on as long as formerly and overtime pay given.

Considering present conditions it would appear that it is the part of wisdom for workmen to refrain from further exorbitant demands. The season just past has shown that employers have reached the limit of their ability to pay increased wages. There is no use making goods if the cost of production is so great that the public will not buy them. Competition and the buying public are the determining factors. Canadian manufacturers are now in competition with other countries where wages are much lower. By further demands workmen may overshoot the mark and destroy the industries which are their support.

VISIT OF BRITISH JOURNALISTS.

A LARGE number of British journalists have been touring Canada during the past few weeks. They represent many of the most influential of the Old Country press, and have been over just to see what Canada was, whose name has been kept so prominently before their eyes for the past decade. They have been hurried from one end of the country to the other, not being given as much time as was to be desired to see the many points of interests, but ever being kept impressed with the bigness of the country, the teeming fertility of its soil, the abounding wealth of its forests, streams and mines, and the business acumen of its citizens.

Such a visit is of vast importance to Canada. It will not be alone the accounts of the trip which will appear in newspapers throughout Great Britain. These will prove of inestimable value in advertising our resources. But it will be in the knowledge of the country which these editorial writers will carry into their work henceforth, that the chief benefit to Canada will come. The only way to know a country is to visit it personally, to mingle with its people, and to get to appreciate their point of view. Upon this basis all succeeding events can be built and the proper position allotted to them.

Canada has suffered in the past from a lack of knowledge upon the part of Britishers. This is not to be wondered at. We are, or used to be, a long way from Europe. Fast steamships and the cables are apparently lessening this distance steadily. Nor were we so many in population or wealth as we are now. Now we have an enormous buying power. It be hooves the people of Great Britain to get fully acquainted with us. It will be to their advantage.

Still we look on the visit of the journalists as of paramount importance to us, because we want immigrants of British stock. The sympathetic treatment of Canada by the newspapers is sure to be influential in turning their thoughts to this land. Canada will ever be glad to welcome members of the the fourth estate and show them the best we produce.

Comment of the Month

Labor in New Zealand.

The more detailed the information we get about the operation of the compulsory arbitration law in New Zealand, the less satisfactory it appears. The law in its present shape offers no means by which strikers can be made to abide by an adverse decision of the board of arbitration. They can be fined, but it is agreed that the fines are inadequate. One authority declares that no fines which the workers could pay, either as individuals or as a union, would be enough to balance the loss which a great strike might impose on an important manufacturing concern. It is held that the government itself must be compelled to carry on the business that is suspended by strike or lock-out—must save the employers from loss when strikers refuse to accept the court's decision, or save the workers from loss of wages should employers refuse to continue work after a lock-out.

Canadian Freight Classification—No. 13—Effective Sept. 1, 1907.

As announced in August number, Classification No. 13, as approved of by the Board of Railway Commissioners for Canada, came into effect September 1st, 1907. It supersedes all previous classifications and supplements thereto. As previously announced, there are a number of important changes in the new Classification, with regard to the rules and ratings, and especially in the owners' risk conditions. These changes have been legalized by the Board, and are therefore binding upon the shipping public as well as on the railways. It is important that shippers should compare the ratings in No. 13 with those in Classification No. 12, with supplements thereto formerly in effect, thus ascertaining whether or not any change has been made in the ratings of conditions of carriage in which they are interested. This will, no doubt, obviate any difficulty or possible misunderstandings in the shipping departments, as well as with customers in regard to freight charges.

Copies of the new Classification will be sent shippers without cost on application to T. Marshall, Secretary Canadian Freight Association, Toronto.

The Work of Factories.

"There would be no common people if there were no manufacturers." These words of Alderman Wright, of Hamilton, give expression to the spirit which has made the city on Burlington Bay the bustling hive of industry that it now is. A problem which is canvassed at every meeting of agriculturalists is how to keep the boys on the farm. The fact that boys leave the farm and gravitate to the cities is conclusive evidence that work in factories provides a more profitable and pleasant occupation than does agriculture. If Canada does not provide openings for her own sons in the occupations they desire, they will drift off to some country where such work is open to them. The investigations recently made by Mr. S. Morley Wickett showed that there were about a million and a quarter Canadian-born people resident in the United States. Did they go there because they liked the country better? Not so. Not one of them but would have preferred to remain in the land of his birth had the opportunities existed here. The opportunities were those which manufacturing industries provide. By an increase in factories all those subsidiary interests will be brought into existence which go to make up a prosperous country.

Exhibition in Edinburgh.

A national exhibition will be held in 1908 in Edinburgh. A successful exhibition was held in the same city in 1886, and this one is prompted by the excellent results of the former. The cities throughout Scotland have taken the scheme up with enthusiasm and the prospects are now exceedingly bright. The special aim of the exhibition will be to bring together all that is best in industry, art, science, and literature in British dominions, all over the world. Exhibits from other nationalities will be encouraged to the utmost as an incentive to greater enterprise. The corporation of Edinburgh has placed at the disposal of the Exhibition Committee Laughton Park. Most of the prominent men in Scotland have accepted positions on the various committees which will be in charge. Full information may be had from Mr. W. H. Knight, General Manager, 45 York Street, Edinburgh.

Important Orders Issued by the Board of Railway Commissioners.

The Board of Railway Commissioners has issued an order directing that every railway company, subject to the Legislative authority of the Parliament of Canada, furnish the Board on or before the first day of October next a written statement or statements for the year ending June 30th, 1907, showing in detail.

A. The assets and liabilities of the company.

B. The amount of stock issued and outstanding, etc.

C. The amount and value of the consideration received by the company, etc.

D. The gross earnings or receipts, expenditures, etc.

E. The amount and nature of any bonus, gift or subsidy received by the company, etc.

F. The bonds issued at any time by the company, etc.

G. The amount and nature of the consideration received, etc.

H. The character and extent of any liabilities outstanding, etc.

I. The cost of construction of the company's railways or any part thereof, etc.

J. The amount and nature of the consideration paid by the company for any property acquired by it.

K. The particulars of any lease, contract or arrangement entered into between the company and any other company or person.

L. And generally, the extent, nature, value and particulars of the property, earnings and business of the company.

The Board further directs that each railway company shall furnish to the Board on or before the first day of October next a statement showing the details and particulars for the year ending June 30th, 1907, as follows: Total miles under operation, details as to freight and passenger revenue per mile of road, and carried one mile, etc.

The Board has also ordered that the railways furnish within three months of the date of the order (namely, July 4th, 1907), information as to the railway company or companies with which it has direct connections in Canada, the railway company or companies with which they have joint tariffs, whether any such company is willing to extend the scope of such joint tariffs, the railway company or companies with which every such company is prepared to negotiate with such connecting company or companies for joint tariffs; if not, to state fully their reasons for objecting.

These orders are of importance in that they will enable the Board in the first place to determine whether or not rates being charged are fair and reasonable, and in the second place whether or not through routes and rates are being afforded by all of the railways.

Gray Iron—Its Manufacture and Properties

By S. B. CHADSEY, B.A.Sc, Metallurgist, International Harvester Company, Hamilton.

THE classification of the various materials known under the general names of iron and steel is a subject that has given rise to much discussion, and considerable ingenuity has been expended upon it owing to the difficulties by which it is beset, and the complex nature of many of the iron products. Without venturing upon this field we may refer to the popular view which regards steel and wrought iron as clearly distinct from the general class of products embraced under the term *cast iron*. The different varieties of steel and of cast iron belong in reality to a series, and the properties of its members vary so gradually that it is by no means easy to state just where a dividing line between any members of the series should be placed. What we know as cast iron, however, has a minimum carbon content not much below two per cent., and it is the percentage of carbon which finally determines the position of a member in the steel-iron series.

There are two well recognized grades of cast iron, namely, gray and white, so called on account of the appearance of the fractured surface; the white iron showing a silvery crystalline surface, and the gray a fracture that is best described by the term under which it is generally known. This difference is due to the condition of the carbon content, which in the white iron is almost entirely combined in a chemical manner with the iron, while in the gray it is largely separated in the form of graphite, the plates of which occurring between the crystals of iron give rise to the characteristic gray appearance. We will attempt in what follows to outline some features in connection with the manufacture and properties of gray iron, together with a statement of the tests that are more commonly employed as a check upon its quality.

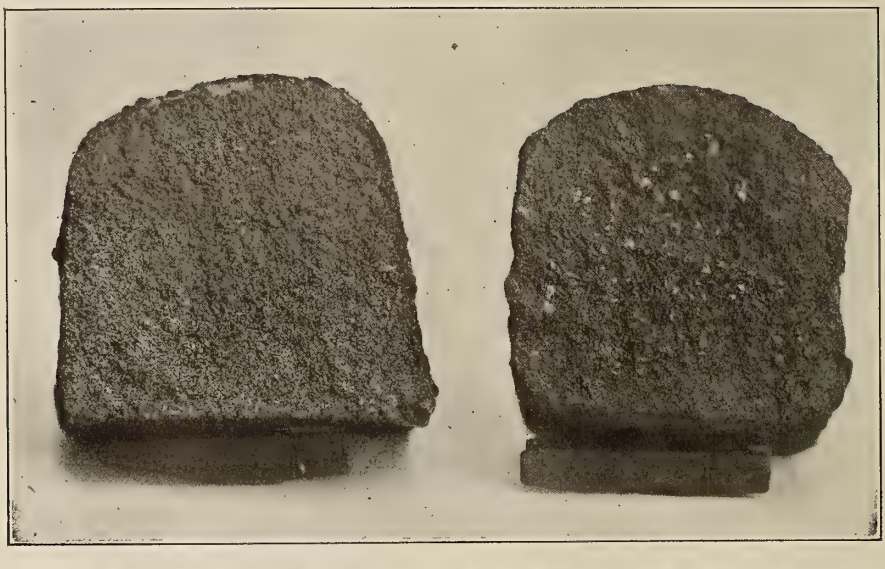


Fig. 1—Showing fractures of iron which grades No. 1 by fracture, but No. 3 by analysis

General Properties.

With regard to the general properties of gray iron, one of the most valuable is the facility with which it may be cast, and the delicacy of pattern which the surface is capable of taking in the mold. This is due to its *fluidity*, and this depends not only upon the original temperature, but also upon the composition of the metal which greatly influences the maintenance of the fluid condition. In point of *strength* the best showing is made by gray iron when it is subjected to compression, and the least favorable when it is under tension or subjected to violent or repeated shocks. Its compressive strength per square inch may rise from 150,000 to 200,000 pounds, while its strength under tension rarely rises above 33,000 pounds, and may be as low as 15,000 pounds. It is possessed of but little ductility, and is consequently broken with comparative ease under shock. *Its shrinkage*, however, is small, much less than that of white iron, and this fact is of great value in the founders' practice. It may be readily machined, and it may be varied in character at the will of the founder to render it applicable to a wide variety of uses. Such are some of the characteristics of gray iron which render it so valuable a material, and when it is remembered that its cost is low, the reason for its prominent position as a commercial product is at once apparent.

It would be impossible to attempt to classify the uses to which gray iron is applied in daily practice. We have referred, however, to the fact that owing to the possibility of varying its properties within certain limits, it may be adapted to a variety of situations of very diverse character. The founder may alter the density of his product, making it close grained and strong or of a softer and less compact nature. By proper attention to the mixture of the metals, and to the conditions of melting and casting, the tensile strength may be raised while the metal still retains a sufficient degree of softness to admit of its being readily machined. It must be admitted, however, that the control exercised by the founder under the best of conditions is in no way equal to that within the reach of the steel maker, and consequently the products of the former are subject to a greater variation in quality than those of the latter. In view of this fact, it is the more remarkable that while it is customary to subject steel to severe tests and a careful examination before it is put into service, it is comparatively rare that a similar examination is required in the case of gray iron. Inasmuch as the iron is much more likely to vary, it would seem more reasonable to give it at least as careful attention as is given to the product which is less likely to display unsatisfactory variations. The reason, of course, lies partly in the fact that as steel has been placed in the most important and trying positions the chief attention has been given to its quality, and it has been purchased under careful and well enforced specifications. It is

to be hoped, however, that greater attention will be given to the proper examination and testing of gray iron than has been the practice in the past.

Two Methods of Melting.

There are two processes by which gray iron is melted, namely, by means of the Reverberatory or Air Furnace, and by means of the Cupola Furnace, but, although the product of the



Fig. 2—Photo-micrograph taken under a magnification of 750 diameters. The dark portions represent the plates of graphite interspersed through the metallic iron

Reverberatory Furnace is markedly superior to that of the Cupola, it is by means of the latter that by far the larger part of such melting is done. This is due to the lower cost of cupola metal while its properties are sufficiently good to meet all ordinary requirements. The air furnace is adopted, therefore, only when the need of a superior product outweighs the considerations of cost. The cause of this superiority has never been clearly explained, although it is generally supposed to be due to the greater absorption of gases by the cupola metal as it flows through the area of blast in the furnace. It is evident, moreover, that it is possible to secure a greater uniformity in the air furnace in which the total charge is melted into one bath before it is cast than in the cupola where the iron is melted and drawn from the furnace in successive portions which must follow in composition the variations of the materials melted.

The raw materials for the manufacture of gray iron, considering only the cupola process, are mainly pig iron and scrap of various sorts, coke and limestone, or a substitute therefor. In the quality of these materials the founder is directly interested since it is upon that quality that the success of his work and the regularity of his product very largely depends. It was formerly the custom, and it still prevails to some extent, to purchase pig iron by grades that were determined by the appearance of the fracture to be No. 1, No. 2, No. 3, etc. This classification was based upon the crystal size, as it was considered that an open grained pig would produce softer castings than a more finely grained one would give. There was something is this method of classifying, or it would not for so long have been universally accepted by foundrymen. It was at one time the most reliable guide to quality available, and while it was always somewhat uncertain, it served a valuable purpose. But the day for such grading is passed, although some foundrymen still cling to it. Pig iron can, and always should be, purchased upon the basis of chemical analysis, and not in any way upon the basis of fracture. The influence of the various elements present in pig iron upon the structure and general properties of the gray iron product are now fairly well understood, and all foundrymen should now be able to make up their furnace mixtures according to analytical results. Fractures are frequently misleading. It has been repeatedly demonstrated that an iron grading as No. 1 by fracture may grade No. 3 or lower by analysis, and as it is the composition and not the structure of the pig iron that determines the quality of the foundry product it is evident that good results could not be obtained by using such metal as No. 1 grade. We show in Fig. 1 two fractures in illustration of this point. The pig of open fracture was found to contain silicon, 1.17 per cent; sulphur, 0.28 per cent.; phosphorus, .60; manganese, .64; while the pig of close grain gave silicon, 3.20; sulphur, .025; phosphorus, .76; manganese, .95; the analysis thus reversing the grading of the metal. It is necessary to the best results, therefore, that all pig iron should be analyzed, if possible, in the laboratory of the founder, since, for various reasons, that we will not attempt to outline here, very considerable variations from the furnace analysis frequently are found to exist.

Importance of Coke.

Of the other materials used by the founder the one calling most urgently for analysis is the coke. This is due to the fact that the amount of sulphur contained by it may be sufficient to cause irreparable injury to the metal, and partial or total loss of the castings poured. Owing to the contact of the molten metal with the incandescent coke of the cupola, sulphur from the fuel is certain to be absorbed by the iron, and experience has shown that the maximum allowable limit of sulphur in foundry coke is 1.00 per cent. There is much coke on the market containing a larger percentage, and if such fuel is used trouble is certain to follow. It is important, moreover, that the amount of ash contained be held within reasonable limits, say, 11.00 per cent, or 12.00 per cent. The greater the ash the greater must be the slag produced in the furnace, and as much heat is required to produce this slag it is evident that economy demands it to be held as low as possible. Moreover, a large percentage of ash necessarily reduces directly the heating power of the coke, since it lowers the percentage of combustible material that is present. Analyses may profitably be made of other materials about the furnace, such as limestone

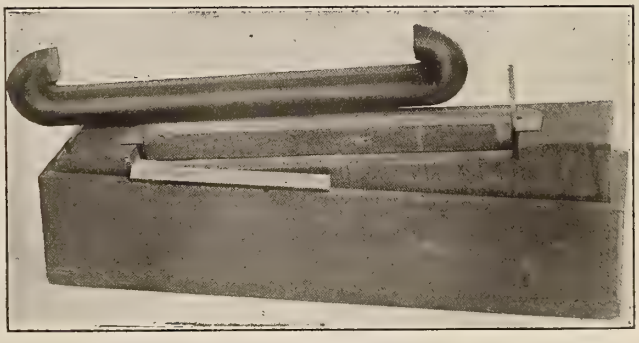


Fig 3—Apparatus for testing iron

and the various refractories, but we are unable to refer to them in this article.

Having the analysis of the various shipments of pig iron, of the fuel, of the shop scrap, and (approximately) of the miscellaneous purchased scrap, it is possible to control the mixtures of the metals charged, and consequently the quality of the resulting iron. By way of illustration we give a charge made up of two grades of pig and two of scrap. The analyses of the raw materials were as follows:

GRAY IRON.

	Silicon.	Sulphur.	Phosphorus.	Manganese
Pig Iron, Pile 1	3.34	.038	1.00	1.12
Pig Iron, Pile 2	1.65	.061	.48	.64
Shop Scrap	2.25	.080	.90	.60
Miscellaneous Scrap	1.95	.090	.80	.55

Each charge of 3,000 lbs. was made up as follows :
1,100 lbs. pig, Pile 1.
700 lbs. pig, Pile 2.
1,000 lbs. pig, Shop scrap.
200 lbs. pig, Miscellaneous scrap.

The percentage of silicon in the mixture was therefore :

$$\begin{aligned} 3.34 \times 1100 &= 3674.00 \\ 1.65 \times 700 &= 1155.00 \\ 2.35 \times 1000 &= 2350.00 \\ 1.95 \times 200 &= 395.00 \\ & \overline{7574.00} \end{aligned}$$

$$\frac{7574.00}{3000} = 2.52 \text{ per cent.}$$

The average percentages of the other elements calculated according to the same method give the total estimated analysis of the charge :

Silicon.	Sulphur,	Phosphorus.	Manganese.
2.52	.061.	.83	.79

There is always a loss of silicon during the melting amounting to about .25 per cent., and a gain in sulphur dependent upon the condition of the fuel and the furnace management, but usually amounting to .02 per cent. in average practice. The analysis of the gray iron resulting from the foregoing charge was :

Silicon.	Sulphur.	Phosphorus.	Manganese.
2.30	.085	.89	.62

Thus there was a loss in silicon of .22 per cent., a gain in sulphur of .024 per cent., a loss of manganese of .17 per cent., while the difference in phosphorus was very small.

In actual practice it is possible to maintain for long periods an average silicon in the product within a limit of .10 per cent., while the sulphur can be held within a limit of .10 per cent. The other elements can be similarly controlled by a suitable combination of raw metals, and as the grade of the metal is largely regulated by the percentages of these elements, it is possible to prevent serious variations in quality and to greatly reduce losses due to hard iron and the like.

Carbon the Controlling Element.

While we are not able in this paper to enter upon the subject of the influence of the individual elements, we wish to direct attention in passing to the fact that the real controlling element in iron is carbon, and that the influence of silicon and sulphur are secondary, their effect depending upon their influence upon the state of combination of the carbon. In gray iron the carbon exists most largely in the free state as graphitic scales between the crystals of iron, and other things being equal, the larger the percentage of graphite and the smaller the percentage of chemically combined carbon the softer will be the iron. Silicon and sulphur largely influence this state of combination, and consequently are much discussed in the foundry, while the carbon content is less frequently referred to. By way of illustration of the presence of plates of graphite in the body of gray iron metal, we reproduce a photo-micrograph taken under a magnification of 750 diameters, in which the dark portions represent the plates of graphite interspersed throughout the metallic iron, Fig. 2.

Physical Tests.

There are beside chemical tests a number of physical tests that may be applied to gray iron as indications of its quality, each of which serves a particular purpose, and may become a necessity in routine work. These tests are to determine (1) the *transverse strength* and deflection under pressure of a special test bar; (2) the amount of *shrinkage* per lineal foot; (3) the *chilling properties;* (4) *hardness;* (5) *tensile strength* per square inch. Of these the one least frequently used is that for determining the tensile strength, although this property is, in some cases, made a prominent condition of acceptance of material.

The transverse strength may be taken upon any bar of convenient size, but it is desirable that there should be a greater uniformity in this respect than is the case under current practice, inasmuch as for purposes of comparison of the product of different foundries a standard bar is very much to be desired. The bar which is probably most common at present, though not necessarily on that account the most desirable, is one inch square in section, and is broken in supports 12 inches apart. An attempt has been made to bring about the adoption of a round bar, but as yet we believe without very great success.

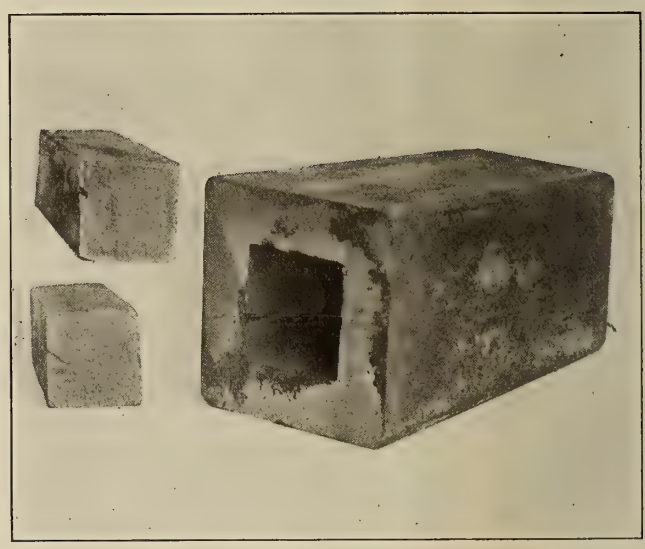


Fig. 4—Cast iron mold for testing the chilling properties of gray iron. The fracture of two chilled pieces is also shown, showing the chilled or crystalline margin.

The shrinkage may be conveniently determined by casting bars one inch square in section, between cast iron yokes placed in the mold and measuring the shrinkage by means of a graduated tapered gauge placed in the space between the end of the test bar and a steel gauge corresponding in length to the yokes in which the bars were cast. We show in Figure 3 the apparatus required by which routine tests are regularly taken. The bars are cast 13 1-3 inches in length, and the actual shrinkage found is diminished by one-tenth to obtain the shrinkage per foot of length. The amount of shrinkage is dependent upon the size of the bar used, as well as upon the grade of the metal, a fact that is sometimes overlooked by persons generally well-informed regarding the working of metals, but it may be stated that the shrinkage of ⅛ inch per foot, so frequently regarded as a sacred thing, is one which is only rarely met with in practical working.

A very useful and convenient test is one for determining the chilling properties of the iron, or the extent to which it may be transformed into white iron by casting it in a mold that will conduct away its heat very rapidly. For this pur-

pose a cast iron mold of tapered form is used, such as is shown in Figure 4. We show also in this cut the fracture of two chill test pieces in which a chilled or crystalline margin of different depths is shown. The existence of chilling properties in a marked degree may or may not be a desirable feature.

The *hardness* of the metal may be tested in a variety of ways, but for shop purposes a drilling test is probably the most convenient. An adaptation of a common drill press for this purpose is shown in Figure 5. In order to reduce the wearing of the drill as much as possible a special high speed drill is used in making the test, the size adopted being ½ inch,

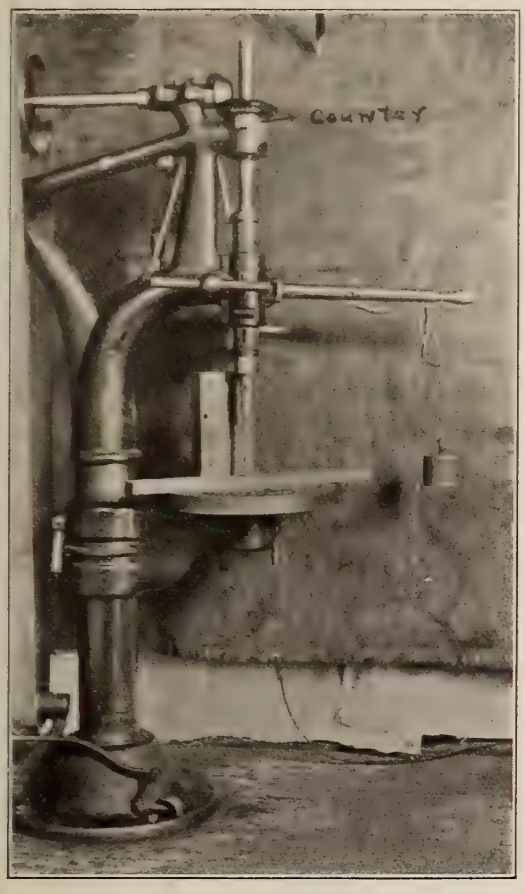


Fig. 5—Method of testing iron by a drill

and since differences in shape of the drill point produced in different grindings influence its cutting speed, standard bars of iron are kept with which any particular iron may be compared. A special weight is hung upon the feed lever in order that the pressure upon the drill may be kept uniform; and a revolution counter is arranged to register the number of revolutions required to drill a hole ½ inch in depth. The time of drilling may also be taken by means of a stop watch, although this is not a necessary feature. By these means fairly satisfactory results may be obtained in determining the relative hardness of different grades.

It may be added that while it is not necessary in regular practice to use all the foregoing tests upon all irons cast, they may all be used with advantage as occasion demands, and by their means great asistance obtained in regulating and controlling the variations in the quality of the metal.

It is announced that the Bemis Bag Company will establish a plant in Welland, Ont. A number of cities have been negotiating for this factory. The company will spend a million and a half on its plant, and will employ 1,500 hands.

ALLOY STEELS.

Iron has been successfully alloyed with most of the known metals; only a few alloys, however, possess much commercial importance, and it is only with these that we have to deal in considering their adaptability for forgings, etc. Alloy steels possess many advantages over carbon steel for certain uses, and notwithstanding their increased cost are finding a wider field of application every year.

Tungsten steel was the first alloy steel to be exploited to any extent. It proved useful in metal cutting tools, and is more or less restricted to that use. Chromium steel was next exploited, and found a wider field of usefulness, being largely used in metal cutting tools as well as for other purposes, the most notable of which is armor piercing projectiles. Manganese steel was next introduced to the market. This steel is remarkable for its toughness, combined with hardness when quenched in water, but, owing to the fact that no means have ever been found of softening it, it cannot be machined. Nickel steel was next brought out, and found a much wider field of usefulness than the preceding, and is to-day the most largely used of any of the alloy steels.

Vanadium steel is the last applicant for favor, and while it holds out more promise than any, it has probably not fully passed the experimental stage that leads to wide application. It is being manufactured in increasing quantities every year.

Much has been done in combining two or more of the alloys in steel, with such beneficial result that it is hoped to reach almost any desired quality through the proper combination of the metals now at our disposal.

Chrome and nickel produce an alloy steel combining the good properties of each in a large measure, *i.e.*, strength, elasticity and toughness. One desirable feature in this alloy steel is that, with proper heat treatment, it can be made fibrous like wrought iron, which gives it great resistance to shock, with less liability to crack at corners. It is highly susceptible to heat treatment, and requires exact temperatures in order to obtain the best results.

Nickel and manganese produce an alloy steel of high elastic limit proportion, and give great endurance qualities. The combination increases the susceptibility to heat treatment. Silicon and manganese produce an alloy steel of high elastic limit proportion, and also give great endurance qualities.—*American Exporter.*

PIG IRON PRODUCTION IN CANADA.

The pig iron production of the Dominion of Canada is keeping pace with the growth of other industries. In thirteen years the increase has risen about 1,200 per cent., an average of nearly 100 per cent. per year. In 1894 the output was 44,791 tons, and in 1906, 541,957 tons. The production last year was double that of 1904, when the output was only 270,942 tons. The output per year since 1894 up to last year is given in the following table:

1894	44,791
1895	37,829
1896	60,030
1897	53,796
1898	68,755
1899	94,077
1900	86,090
1901	244,976
1902	319,557
1903	265,418
1904	270,942
1905	468,003
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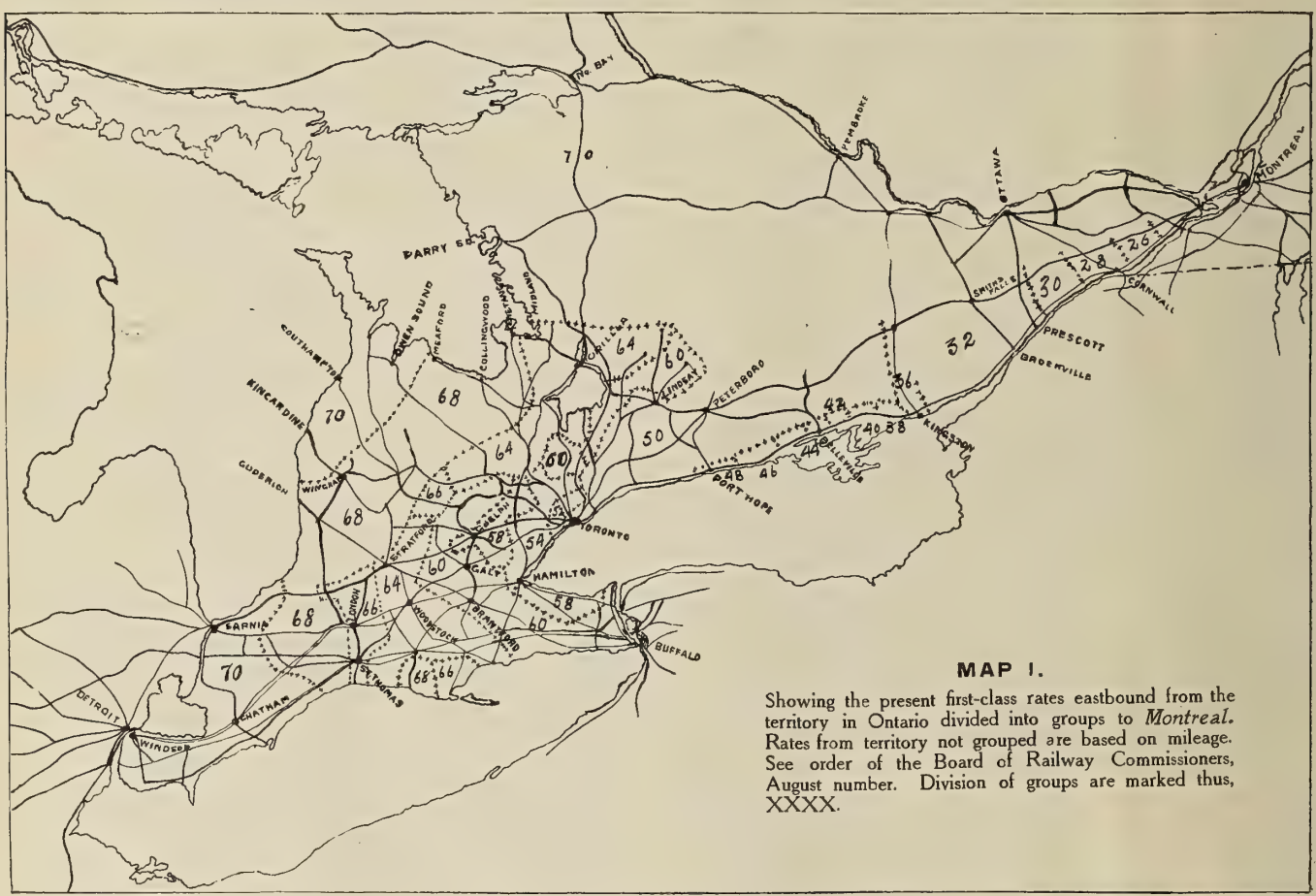
Transportation Problems

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Recent orders issued by the Board, of vital importance to the Association, direct particular attention to the work of the Commission. A brief review may be interesting. When the Board of Railway Commissioners was constituted, under an Act of the Parliament of Canada, passed in 1903, coming into operation in February, 1904, it was, no doubt, intended for the purpose which the title implies, viz., jurisdiction over the railways. Since that time increased duties have been imposed upon it by parliament; that is to say, the telephone and express companies have been added. The Board has been invested with powers to prescribe and regulate their tolls. It has also been suggested that the telegraph and telephone companies be added to its numerous duties. No doubt this will come in time, as there seems to be a tendency on the part of parliament to refer any knotty questions affecting such public utilities to the Commission—a wise precaution.

Notwithstanding these increased duties, the personnel of the Commission has not been changed. That is to say, the Board consists of three commissioners, as originally provided for in the Act.

The jurisdiction of the Board extends to every railway subject to the legislative authority of the Parliament of Canada. This practically means all railways, except those owned by the Provincial and Federal Governments. Before railways are constructed they have to approve of location places, of the gradients and curves proposed, etc.; before they are opened for traffic they have to be inspected by the Board's Engineer, and the Board must give leave for them to be operated. The plans of the bridges must be approved of by the Board; one railway cannot cross another without the Board's consent; nor can a railway cross or run along a highway, nor can a new railway be opened across a railway without such permission.



MAP I.

Showing the present first-class rates eastbound from the territory in Ontario divided into groups to *Montreal.* Rates from territory not grouped are based on mileage. See order of the Board of Railway Commissioners, August number. Division of groups are marked thus, XXXX.

Maps I and II show the freight rate in cents per hundred pounds under the old and the new schedules. A comparison will show the reductions.

The Board has certain legislative power on subjects which Parliament has not seen fit to deal with in detail. The Board is a court of record, with the same power to enforce judgments as superior courts have. The Governor-General-in-Council is given jurisdiction to set aside, or vary, any order of the Board, and to the Governor-General an appeal lies, but that is the only general appeal. The Board has the power to prescribe the classification of goods, for the purpose of determining the tolls to be charged for their carriage, etc. If the Board at any time considers the rates unreasonable or unjust, as submitted by the railways, it may disallow the tariffs. Full control is thus given to the Board, and these tariffs are made subject to its discretion. Car shortages, demurrage rules, reciprocal demurrage, delays in transit, inadequate facilities, etc., are all matters subject to the regulation of the Board. The enormous amount of work placed upon the Board will therefore be seen readily. When a

comparison of the staff is made with that of the Interstate Commerce Commission the wonder is that they are able to accomplish anything like the work which has been done.

At the present time the official staff of the Commission (not including the Commissioner and Secretary), are as follows:—Chief Engineer, 1; Assistant Engineers, 3; Traffic Expert, 1; Law Clerk, 1; Inspectors of Accidents, 2; Inspector of Equipment, 1; Operating Assistant, 1; Clerical assistance in the various departments, about 30.

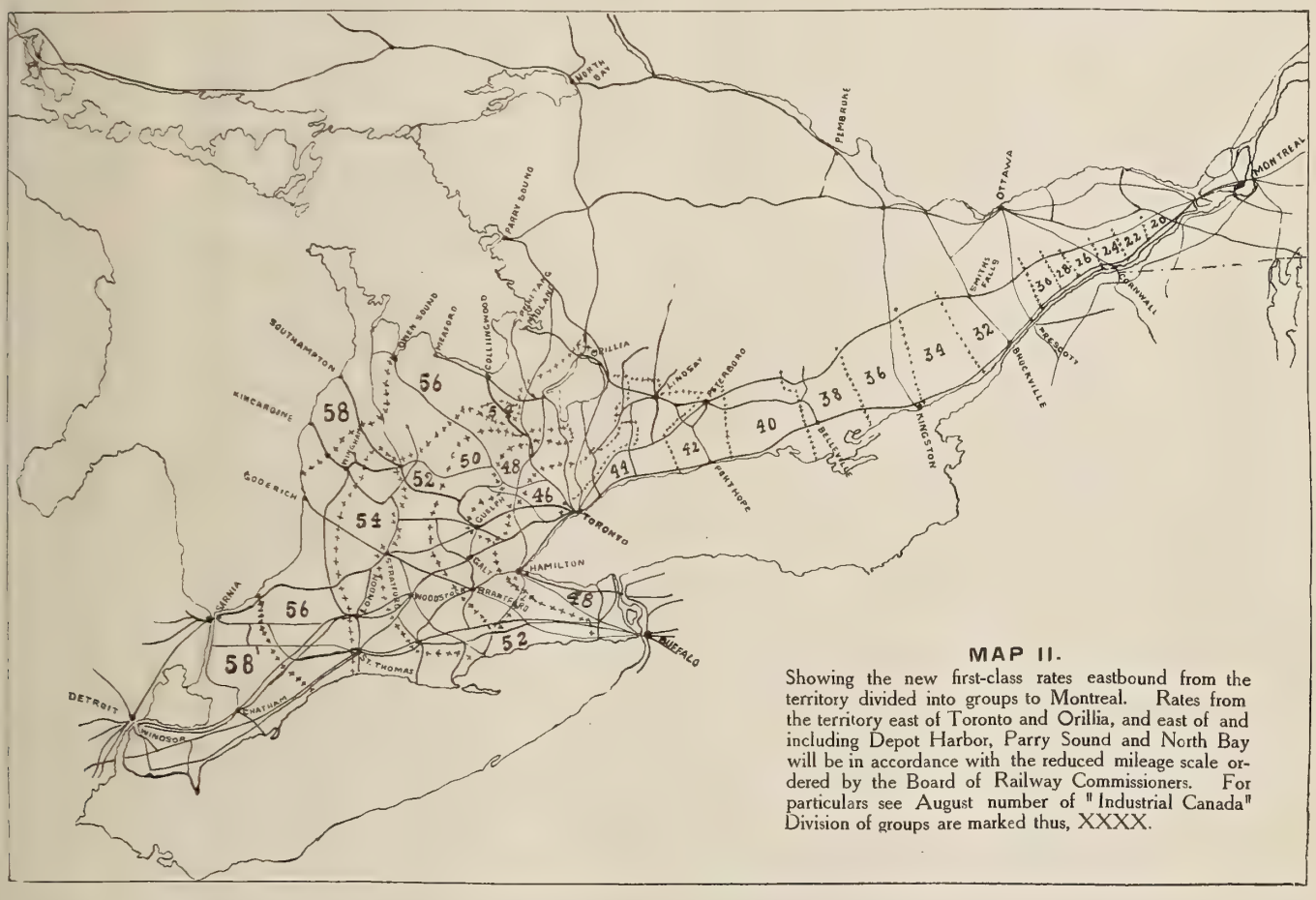
As against this there are employed on the staff of the Interstate Commission 221 persons (not including the Commissioners and Secretary), as follows:—Assistant Secretary, 1; Chief Statistician, 1; Assistant Statistician, 1; Solicitor, 1; Assistant Solicitor, 1; Auditor, 1; Assistant Auditor, 1; Special Agent, 1; Chief Clerk, 1; Law Clerks, 3; Confidential Clerks, 5; Official Stenographers, 2; Disbursing Clerk, 1; Clerks, 146; Inspector Clerk, 1; Inspectors, 19; Messengers, 14; Others, 21.

There are seven Commissioners, each of which, except the Chairman, has immediate charge of a branch of the routine, as follows:—One Chairman; one in charge of Statistics; one the Law Department; one the Tariff Department; one Accidents and Safety Appliances; one Accounts; and one Criminal Prosecutions. The Commissioners so arrange that investigations may be held in different parts of the union at the same time. It will be noted that their duties are confined to the operation of the various railways only, whereas the authority of the Canadian Commission not only extends to the construction of the lines, but continues after and during their operation.

The duties of the clerical staff of the Interstate Commerce Commission are so divided that the work can be carried on expeditiously and publicity given to same without delay, in the manner in which it is intended, an almost impossibility with the our present system. It will also be observed that every statistic pertaining to the operation of the railways under the jurisdiction of the Interstate Commerce Commission is published by that body, another impossble task at present with our Commission.

There can be no question of the enormous value of the Board of Railway Commissioners to Canada, although it is only in its infancy as compared with some of the Commissions in other countries. It is far superior in many respects to any other. Professor Mavor, of the University of Toronto, holds that the Canadian system of control over railways is the most satisfactory obtaining in any country in the world.

At the same time it is not expected of the present Board that they should continue to perform the duties which have devolved upon them without some reorganization which would tend to divide and specialize the work. The public generally will heartily endorse any recommendations to that end, which are made by the Chief Commissioner and his co-commissioners.



MAP II.

Showing the new first-class rates eastbound from the territory divided into groups to Montreal. Rates from the territory east of Toronto and Orillia, and east of and including Depot Harbor, Parry Sound and North Bay will be in accordance with the reduced mileage scale ordered by the Board of Railway Commissioners. For particulars see August number of "Industrial Canada" Division of groups are marked thus, XXXX.

RELATION OF RAILWAYS TO THE PUBLIC.

In a circular recently issued to the employees of the Lake Shore and Michigan Southern R.R., the General Manager says:

"The public judges a railroad corporation very largely by the treatment it is accorded by the agent representing the company in whatever capacity he may be employed. A reputation for fair dealing, with courteous and absolutely fair treatment of all customers, is essential to the success of all railroads.

"The good-will and friendship of the community served by our railroad is the most valuable asset it can have; and the strongest recommendation for promoting any employee in any department can possibly have is the fact that by uniform courtesy and kind accommodation of patrons he has secured for himself and for the road the good-will and the friendship of the communities in which he is located."

There is no doubt as to the tendency of the railways in the United States to a better understanding of their relationship to the public, and it is largely in this way that it can be brought about. There is a strong feeling, and justly so, that the Canadian roads have not extended that courtesy to the public to which it is entitled. Any one who has had experience with a local agent in some small town, or even in larger ones, when there is practically no competition, will testify to this. The experience is not confined to station agents, for instance the average ticket clerk (usually exceedingly young and thereby consequential), is almost unapproachable.

These could easily be remedied if the higher officials in the midst of their strenousity, would occasionally drop off and mingle with the people who pay the freight and contribute to the passenger earnings.

Courteous treatment on the part of railway officials and employees will go a long way to bring about a better understanding between the commercial and transportation interests of the country.

MISREPRESENTATION OF FREIGHT.

The railways in submitting classification No. 13 to the Board of Railway Commissioners for approval were particularly anxious to have, and succeeded in having, the Board order "that any person or company violating the provisions of section 400, sub-section 1, of the Railway Act, shall, in addition to the regular toll, be liable to pay the company a further toll not exceeding fifty per centum of the regular charge." Whilst the above is provided for in the Railway Act, it required an order of the Board before it could be acted upon.

As the order has now come into effect, it is thought advisable to inform the shipping public as to what action has been taken by the railways to enforce it; we, therefore, publish, for the information of shippers, the circular of instructions issued by the Canadian Freight Association to their freight inspectors, as follows:

CANADIAN FREIGHT ASSOCIATION.

TORONTO, ONT., September 1st, 1907.

To Freight Inspectors—

Your attention is called to Rule 17 of the Canadian Classification No. 13, effective 1st September, reading as follows :

(*a*) All shipments are subject to examination and inspection as to correct description and weight, and will be charged at the gross weight, except that when an article is classified to be accepted at estimated weight, such estimated weight will apply.

(*b*) If upon inspection it is ascertained that the articles shipped are not those described in the bill of lading, the charges must be paid upon the articles actually shipped, and at the rates and under the rules provided for by this classification, and subject to the provisions of sub-section "c" of this rule.

(*c*) If any person or company shall knowingly or wilfully by false classification, false weight, false representation of the contents of any package, or false report of weight, or by any other device or means, whether with or without the consent or connivance of any agent or agents of the transportation company, with the intention of obtaining transportation for goods at less than the regular tolls then authorized and in force, such person or company shall, in addition to the regular tolls then authorized or in force, be liable to pay to the transportation company a further toll of fifty per cent. of the regular charge. (See Section 400 of the Railway Act, Chap. 37, R.S.C., 1906, page 1 of this classification.)

The purpose of this rule is to prevent the continuance of misrepresentation, a practice which places shippers who will not resort to fraudulent means in a most unfair and disadvantageous position as compared with shippers who commit such fraud.

There is no desire upon the part of the railways to penalize any shipper who may, through a misinterpretation of the classification, inadvertently misclassify a shipment; but such misinterpretation is not necessary, because a shipper is not asked to classify his goods. All he is required to do is to correctly and fully describe them in his shipping bills and the railways will apply thereto the proper classification.

The sole object of the railways is to stop deliberate fraud and to protect honest shippers.

If after reasonable efforts have been made by you to ascertain and determine the true character of the property, there remains no doubt in your minds as to the wilful intent of the shipper to misrepresent, you will impose the extra toll of fifty per cent. and report particulars to me. If, however, there is any reasonable doubt in your minds, you will permit the shipment to go forward as consigned, without imposing the extra toll, and report the circumstances to this office.

T. MARSHALL, *Secretary.*

It will be noticed that "there is no desire upon the part of the railways to penalize any shipper who may, through a misinterpretation of the classification, inadvertently misclassify a shipment," etc., etc.

Whilst the Board, in putting in effect the law, has left its application in the hands of the railways, it is yet to be proven whether or not this will be satisfactory to all interests.

A Swiss Electric Locomotive.

A new locomotive weighing in all 43 tons, including driving equipment, which alone weighs 23.5 tons, and equipped with single-phase commutator motors and carried on two four-wheeled trucks, has been built at Zurich by the Oerlikon Company. One motor is mounted on each truck, and geared in a ratio of 1 to 3.1 to an intermediate shaft, which, in turn, is coupled by means of a side bar to both axles. All four axles of the locomotive are thus positively driven. The bearing of the crank pin of the intermediate shaft is allowed a slight vertical motion, for the sake of flexibility. Each motor weighs 3.4 tons, and is rated at 200 h.p. when making 650 turns per minute. Tests have demonstrated that the locomotive can start a 250-ton train up a 12 per cent. grade, and that it can attain a speed of 45 km. (28 miles) per hour without any sparking at the brushes.

The current collecting apparatus consists of a curved tubular rod of steel, on which brass rubbing pieces are mounted. These rods are mounted upon a swinging frame, there being two collectors for each locomotive. The arrangement enables them to be placed in contact with the trolley wire when it is on either side of the track, or at a point above the locomotive. The current is delivered at the low frequency of 15 cycles per second, though it is said that the motors operate equally well at 25 cycles. The normal speed of the motor is about three times that of synchronism. There are in each unit eight main poles, provided with compensating windings in grooves, which may be either short-circuited on themselves, or placed in series with the main circuit.

Industrial Discussions.

EMPLOYER'S LIABILITY.

ANYTHING creating a class distinction, especially one of dependence and of special claims upon another class and upon law and government, is most obnoxious to the fundamental principles of a government of freedom and equality. Every man should stand on his own feet, take his own risks and accept the responsibilities of manhood. If an occupation is hazardous it is highly paid accordingly, and has to be so in order to secure men to work in it. The ordinary risk is paid for, and it is for the interest of the employer to lessen it as much as possible. If an accident occurs for which the employer is responsible through neglect to provide every reasonable safe-guard and to take every reasonable care, he should pay for the injury done. If it is caused by earthquake or lightning or fire, or by the negligence of workmen themselves, which he has taken every means to prevent, to compel him to make compensation would be neither justice nor sound policy. He would have no means of reimbursing himself from the "general public," and if the public was required to make up the loss it would be socialism in its rankest form. A general system of socialistic insurance against injury and loss for all members of the community would be more equitable.

One of the most perplexing difficulties of employers in industries using machinery and mechanical appliances, especially those involving special hazard, is to induce workmen to take reasonable care, to prevent them from being negligent and taking needless risks. Let all the risks of loss by accident be put upon the employer and let the workmen be assured of compensation for injury whatever happens, and the difficulty would be multiplied. The sense of responsibility on the part of the workman, hard enough to instill and maintain in any case, would be weakened if not wholly taken away. It is better for the workman to bear his share of responsibility and risk and to take his share of the consequences, so far as they are due to his own action or neglect, than to be put in a dependent and eleemosynary relation to his employer. Inculcation of this class principle, this treatment of the workingmen of this free republic as an inferior caste, to be specially looked after and cared for by a paternal and benevolent Government, instead of being encouraged to take care of and provide for themselves and to become "superbly self-reliant" as citizens equal to all others before the law and under the Government, is demoralizing and degenerating to the very theory of our institutions. It is too common with demagogues and it is sad to see a high official of good intentions and purposes fall into it.—*Journal of Commerce.*

EXPROPRIATION RAMPANT.

"If there is work to be done essential to the public interest, but which the community at the time lacks the means of undertaking, hand it over to private enterprize to be carried out with private capital; when it has been done, proclaim the sacred supremacy of public ownership, and expropriate the work." Such seems to be the policy into which we are being gradually drawn. There can be no doubt as to the effect on the future application of private capital to public works. The question between private and public ownership is surely one not to be decided by any abstract principle, but in accordance with the circumstances of each case, and with due regard for commercial justice. Private management under a compact with the public, properly framed and duly enforced, may be just as good as management by public officials. "The public" is a high-sounding title, but practically it means those who for the time have got public power or influence into their hands. Public ownership in England has proved, to say the least, not so decided a success as to warrant indiscriminate adoption. About the policy of respecting the rule of fair dealing in all cases, public or private, there can be no difference of opinion. Standard Oil is a case apart. The charge there is in effect public robbery on a large scale.—Goldwin Smith in the *Weekly Sun.*

INDUSTRIAL LEGISLATION AND ITS COST.

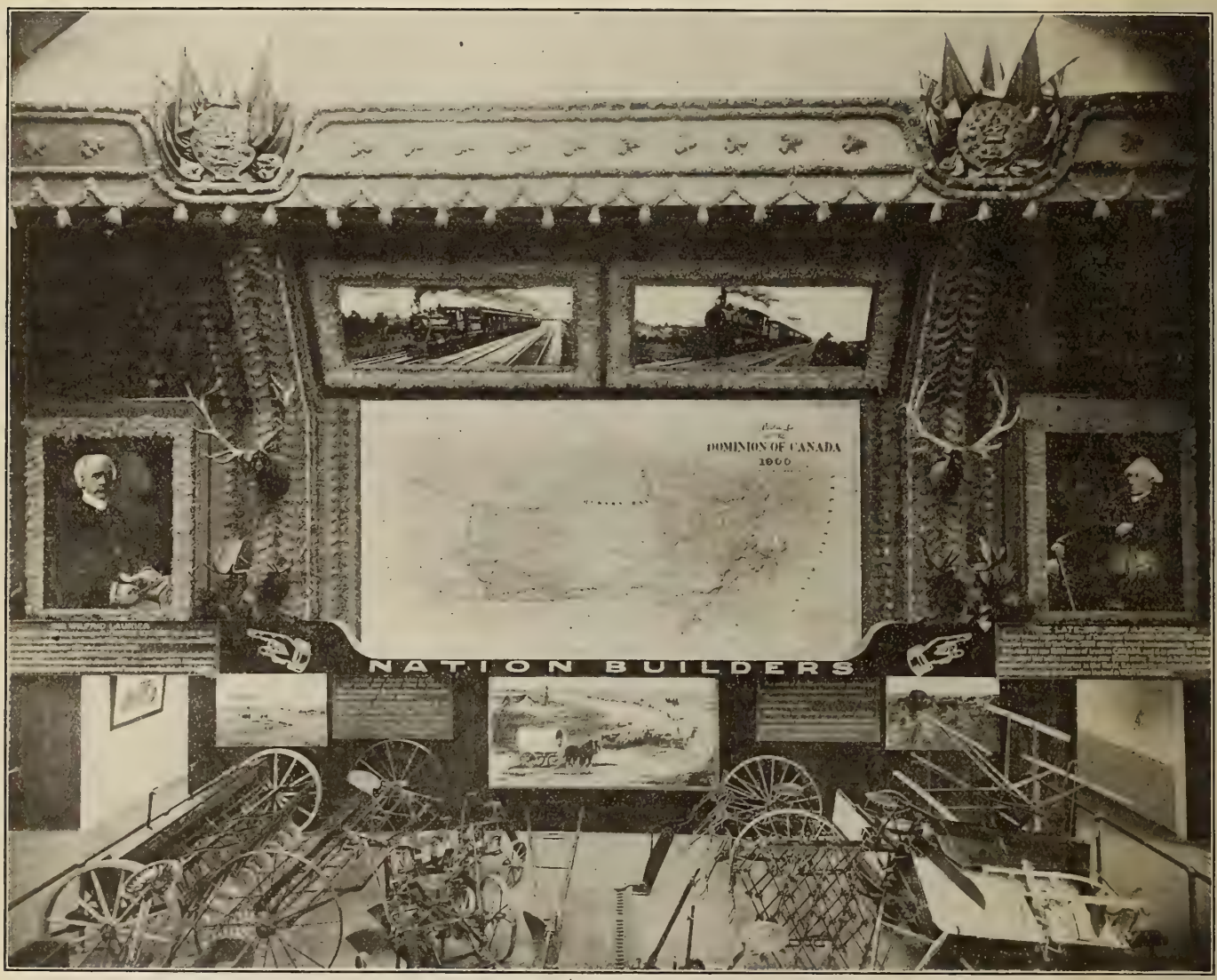
Legislative interference in labor affairs, viewed from the angle of the humanization of industry, is an inestimable boon, but when it adds to the cost of production, and thus increases the toiler's burdens, it is something of a handicap. At present in England and in America there is an unusual amount of activity in framing industrial legislation, and to show that improvements have been effected far more by the development and application of scientific working methods than by legislative enactments intended to be ameliorating is the task which Mr. T. Good sets himself in *Cassier's Magazine* for July. In general, the benefits secured by legislation cost more than they are worth, and the latter is not the most effective means to improve the condition of the operatives.

Confined to his experience in Great Britain, there is, nevertheless, sufficient relevancy to local conditions to make his paper one of interest to our readers. Taking up the new Workmen's Compensation act, imposing liability on employers, he says that when the act of 1897 was passed insurance companies charged only 32 cents per $500 of wages as a premium in the case of risk on textile operatives. In 1905 this had risen to $1.50. With railroads, cost of compensation in 1905 per $500 was $2.50. With iron and steel, $1 compensation per $100 has been paid. Under a new law, operative on July 1, these rates are all doubled. Statistics proving that mining, manufacturing, railroad and seafaring work is nine times more dangerous than textile-working alone, the writer assumes that this new act may impose a tax of $27 per $500 of wages paid on British industry in general.

This will not fall on capital alone Much will fall inevitably on labor, supposedly a gainer by this legislation. Further economies will be attempted, elderly and delicate men will not be retained, and young and strong ones will be speeded up. There are other ways of benefiting labor than by means of legislation. Much mining legislation has been secured, and mining is now as safe as human foresight and present knowledge permit. But much of the general improvement is not due to legislative interference at all, but to the spread of knowledge, the growth of science, and the natural development of humanitarian ideas,—to voluntary effort quite as much as to compulsory regulation. "The moral, social, and educational conditions of our miners have been materially improved; and this improvement in the individual, this improvement in humanity, due to the influences of a progressive civilization, is reflected not only in improved

technical knowledge, but in increased thought and care; and increased knowledge and caution bring a huge increase in safety. Partly through legislation, but chiefly, we believe, through improved knowledge, there has been a large measure of progress in lessening personal risk and injury during the last fifty years." Fatalities dropped from one in every 250, between 1845 and 1855, to one in every 770, between 1896 and 1906.

State regulation within a period of about half a century has added 50 cents per ton to the cost of coal getting, thus increasing the cost of production. This means $120,000,000 a year, and with $185,000,000 threatened, in addition, for workmen's compensation, the writer thinks it is time to halt the movement for restrictive legislation and to adopt a new policy in industrial affairs, to settle the differences of capital and labor without state interference. The latter is a tax on production and a commercial handicap.



Canada's Exhibit at Dublin Exhibition

COMMERCIAL EFFICIENCY IN ENGINEERING.

A very suggestive article appears in a recent issue of the *Manchester Guardian*, on "Financial Efficiency in Engineering." By "financial efficiency," the writer explains that he means the ratio of the net return obtained from a given capital outlay to the capital outlay itself. For instance, on £1,000 capital business is transacted involving an expenditure of £2,300, and producing an income of £2,500, thus leaving a net return of £200. The financial efficiency of the business is therefore 20 per cent. It will at once be objected that it is not always possible to state the financial efficiency of, say, a machine, because the idea of an efficiency is that of a ratio between outgoing and incoming quantities of the same thing. Thus the mechanical efficiency of a steam engine is a ratio of two powers, and the thermal efficiency the ratio of two quantities of heat. In attempting to determine financial efficiency we are faced by the fact that in return for an expenditure of money we receive power, and the two cannot be compared as a ratio. The information as to the return in power from the given expenditure in money is, however, valuable in itself, and when we have such information for alternative machines we can at once determine their relative financial efficiencies. Machinery buyers and users, the writer contends, should refuse to be satisfied with statements as to the physical efficiency of machinery and plant. Salesmen and consulting engineers should be required to work out the financial efficiencies of their schemes, and engineering professors should teach their students how to estimate the financial efficiency in a scientific manner.—*The Machinery Market.*

An effort is being made to reorganize the Southampton Furniture Company.

Atikokan Iron Works

THE first blast furnace in Western Canada has been completed by the Atikokan Iron Company at Port Arthur, and is now ready for operation. Some four years ago, when the U. S. Steel Company began extensive operations in the Duluth iron range, attention was called to the fact, which seemed to have been forgotten, that there was an extension of this range, showing an outcrop in the Thunder Bay District of Western Canada. Some work had been done on this, the Animikie range, but the demand for ore was not such as to guarantee the expenditure necessary to develop. Later on it was found that there were also extensive iron deposits in the district west of Port Arthur, cut by the Canadian Northern main line, and more particularly in the vicinity of Atikokan.

Suitable Ore Available.

Iron ore was becoming a valuable commodity, and the known iron fields were being eagerly sought after by some of the big corporations, so that the completion of a railroad through this section of the Animikie range brought with it a number of prospectors, who conducted tests with diamond drills. The cores obtained offered a sufficient guarantee of the quality and quantity of ore available, and the Atikokan Iron Company was organized. The town of Port Arthur was approached and a site was secured near the western boundary and on the shores of Thunder Bay. Here a smelter has been constructed, with a capacity of 125 tons of pig iron per day. From the analyses of the ore, and the character of the installation, it is expected that a high grade pig will be produced, one which, if a sufficiently low percentage of sulphur can be obtained, will bring a premium in the market.



Blast Furnace

The installation at Port Arthur is a most expensive one, a large portion of the cost being sunk in securing a suitable foundation for the docks, coke ovens and furnace. At the point chosen the ground is low and marshy, there being a great depth of alluvial mud, which has been carried down in ages past by the Kaministikwia River. This mud shoals off slowly into the bay, and the company decided to build its plant out over the bay, as being cheaper than dredging a channel to their docks. Spruce piling was put down to hold the foundations of the different buildings, and millions of feet of timber were used for the purpose.

The Arrangement of the Plant.

The accompanying photographs give an excellent idea of the general layout of the plant. To the east are the coke ovens, a battery of 100, of the beehive type, with a pier running out to deep water, so that coal may be unloaded direct. Car tracks communicate with the charging bins, the coke being transferred by dump cars, giving a minimum of handling. The same system is used in handling the ore, the cars being dumped into a boot, as they are received from the mine, and elevated to the roaster by a bucket conveyor, returning to the charging bins by a gravity system. The charging cars are loaded direct from the bins, weighed and hoisted by an incline cableway to the mouth of the furnace, the cars operating in pairs.

The "stoves," three in number, are of an unusually large size, and are situated in a building adjoining the furnace and casting house, but separated from it only by a fireproof partition. The refractory brick lining for the blast furnace, tuyeres and stoves, were imported from Dundee, Scotland, and a special design of tuyere and water cooling jacket has been adopted. The buildings for all of these departments are of steel. The engine-house is on the west side, and is built entirely of brick. In it is an engine of 1,000 horse-power capacity for driving the air compressors, pumps, dynamos and hoists. The charging cars, cranes in the casting room and bucket elevators, are electrically driven, while there is a battery of boilers for supplying steam for the main engine. When the plant is in operation, however, power will be furnished from the waste gases of the furnace, which are also utilized in heating the stoves, through which the air for the blast is forced before it enters the furnace, getting a temperature of about 1,200 degrees.



Furnace and Roasting Plant

The By-Products.

As yet there has been no installation for the purpose of utilizing the by-products of the coke ovens, owing to the difficulty of finding a market. It is proposed, however, to utilize the gas generated, as a market develops, but the tar and ammonia cannot be saved in the beehive ovens. It is not yet known whether the slag can be utilized in the manu-

facture of cement, but if it is suitable, a cement plant will be added at a later date. The coking coal is being brought from Pennsylvania, and the limestone from the quarries on Lake Erie.

An analysis of the ore from the Atikokan district shows an average of 62 per cent. iron, and 2.5 per cent. of sulphur. It is expected that this latter will be reduced to at least .5 per cent. on roasting. There is only a trace of phosphorus and no titanium present. An analysis of the ores from the vicinity of Loon Lake, east of Port Arthur, shows, iron, 55.20 per cent.; phosphorus, .026 per cent,. and sulphur, none.



Battery of Coke Ovens, fifty on each side

This was from a sorted ore, work which can be done mechanically owing to the nature of the ore body, which is cut by cherty bands.

At the Atikokan mines, the work so far has been largely in the way of development and blocking out the ore body. A couple of tunnels have been driven through the ore body, and it is the ore from these that has been shipped. The road-bed of the C. N. R. from Port Arthur to the mines is not in first-class condition for handling continuous heavy shipment, but it is expected that this will be remedied before the close of the present season. It has ben suggested that the C. P. R. run a spur in from the north, but though the ground has been looked over by the engineers, no steps have yet been taken.

NATIONAL INDUSTRIAL TRAFFIC LEAGUE.

The National Industrial Traffic League was organized in Chicago on August 2, at a meeting of 35 representatives and traffic managers of organizations of shippers and large shipping concerns in all parts of the United States. The purpose of the organization is to secure better co-operation between the shippers, officials of railways, state railroad commissions and the Interstate Commerce Commission, for the promotion of the best interests of the transportation and shipping industries.

The men who attended the meeting represented over 13,000 business concerns. It is an interesting fact that of the 35 who were present, 30 were formerly connected with railways in some capacity.

The *Railway Age*, commenting upon the organization of the league, says:—"It may be made an agency for conferring great benefits upon both railways and their patrons if it shall be conducted along the lines indicated in its articles of association, and if it shall receive proper co-operation from officials of railways and the various state commissions and the Interstate Commerce Commission, etc. The assurance is given that the league's attitude is not and will not be one of hostility to either commissions or railways.

Its aim is to secure a better understanding and better co-operation between regulating authorities, carriers and shippers for the safe-guarding and promotion of the interests of all concerned.

It seems obvious that the railways have nothing to lose and everything to gain by meeting the National Industrial Traffic League half way.

This organization should understand the methods and needs of railways better than any other association of shippers that ever existed in the United States, for a large proportion of its members were formerly railway men. Past experience surely must have convinced every railway traffic manager that much more is to be gained by dealing candidly, fairly and directly with representatives of the shipping interests than by constantly trying issues with them before commissions.

The ideal to be aimed at is the formation of such relations between shipper and carriers that they will settle practically all their differences without the intervention of a third party, and will ask for the intervention of the Interstate and State Commissions only when unavoidable friction develops, and will resort to formal proceedings only when all other means have been exhausted."

The first meeting of the League since its organization will be held in Chicago, on August 27. There are some 18 items on the Agenda, all relating to traffic matters.

The operation of the League will be confined to the United States.

In this connection it may be observed that the policy of the Transportation Department of the Canadian Manufacturers' Association is to negotiate direct with the railways in all matters effecting the shipping and transportation interests of the Association, appealing to the Board of Railway Commissioners only when all other means of adjustment are exhausted. On the other hand, the railways have expressed their willingness to deal promptly with matters taken up with them, recognizing, no doubt, that the aim of the Association is better co-operation between shippers and carriers. In this the Board of Railway Commissioners and its traffic officials lend their assistance by bringing about a more satisfactory situation of affairs without the necessity of hearings or the arbitrary exercise of authority.

CANADIAN PIG IRON PRODUCTION.

The statistics of the American Iron and Steel Association show that the production of pig iron in the Dominion of Canada in the first half of 1907 was 270,100 gross tons, as compared with 259,947 tons in the second half of 1906 and 282,010 tons in the first half. Of the total 265,253 tons was coke iron and 4,847 charcoal iron. The production of Bessemer pig iron amounted to 73,023 tons, against 86,558 tons in the last half of 1906, and 79,051 tons in the first half. The production of basic pig iron was 161,403 tons, as compared with 110,930 tons in the last half of 1906 and 135,298 tons in the first half. The production of malleable Bessemer, foundry, forge and miscellaneous grades was 35,674 tons, a considerable falling off from the record of 62,459 tons in the last half of 1906, and 67,661 tons in the first half. The following table gives the half yearly production in gross tons since 1904 :

	1904.	1905.	1906.	1907.
First half	120,643	210,206	282,010	270,100
Second half	150,299	257,797	259,947	.....
Totals	270,942	468,003	541,957	.....

On June 30, 1907, Canada had 14 completed blast furnaces, of which 10 were in blast and four idle. Of this total 12 were equipped to use coke and two to use charcoal. In addition one coke furnace was being built on June 30 and one charcoal furnace was being rebuilt. Three coke furnaces were also partly erected on the same date, work on which had been suspended for some time.

The Medicine Hat pressed brick works are now in running order, and the plant is turning out 20,000 bricks per day.

Collective Bargaining

A Consideration of Such Practice as Illustrated by the Agreement Between the Federated Engineering Employers and The Allied Trades Unions of the United Kingdom of Great Britain.

IN the evolution of the labor problem it is quite natural that various expedients are devised, advocated, and adopted for the solution of this vexed question, and with the hope that their efficacy may prove sufficient to materially augment industrial peace. All such plans are worthy of the closest scrutiny, with a view of determining their availability, practicability and wisdom. It must not, however, be overlooked that schemes which may be commendable in some instances and under certain conditions, are wholly inadmissable under another and less favorable regime. Thus in England collective bargaining may be justly advocated as a means of allaying friction between employers and employees, since many of the abuses and indefensible contentions of unionism with which America is familiar do not there exist, and for which reason methods of dealing with the problem are and must properly be different in the two countries.

Even in America collective bargaining has been adopted and is being practised in some instances, and there may be found advocates both for and against the procedure, according to the character of conditions with which employers are confronted. The very constituency of labor unions, together with that element of membership which is in control of their direction, must necessarily dictate the availability of any such practice. Certainly as conditions now exist in this country it is useless to advocate and impossible to expect that any such method of dealing with the problem may be alluring and successful.

Whether collective bargaining will ever become in this country a popular and practical solution of the difficulty will perhaps largely depend upon the evolution and possibly the revolution of the purposes and practices of labor unions. Certainly it will not be possible until unions admit the inviolability of several cardinal principles of equity, and abandon as indefensible many of the methods they now employ to enforce their demands. These principles and methods may be concisely stated as follows:

Principles That Must Be Respected.

No closed shop.

No restriction as to the use of tools, machinery, or materials, except such as are unsafe.

No limitation of output.

No restriction as to the number of apprentices and helpers when of proper age.

No sacrifice of the independent workman to the labor union.

Methods That Must Be Abandoned.

Sympathetic strikes.

Picketing.

Violence.

Boycotting.

Compulsory use of the union label.

A Sample of Collective Bargaining.

As an illustration of the possibility of an equitable collective bargain under the most favorable circumstances, reference may be made to the existing agreement between the Federated Engineers Employers and the Allied Trade Unions of the United Kingdom of Great Britain. Under the agreement the employers are not to interfere with the unions and the unions are not to interfere with the employers in their management of their business. Each party is to enjoy perfect freedom within its own proper sphere. Employers may belong to the federation or not, and workmen may belong to the unions or not, as they please, and whichever they choose to do there shall be no discrimination against them on that account. Employers shall be free to hire whom they wish and workmen shall be similarly free to work for whom they wish. No employer is even to ask a workman whether he belongs to a union, and no union workman is to object to working by the side of non-union men. The "open shop" principle is to prevail in full measure on both sides.

The unions have the right of collective bargaining and of fixing the rate at which their members shall work. On the other hand, employers will not be bound to pay uniform rates to all, but may vary pay according to individual capacity, though, of course, they cannot require union men to work for less than the union scale. Employers will also have the right to select men for special work, at special rates, to assign men of their own choice for the operation of machines, ect., instead of being compelled to accept such men as the unions designate. Overtime work is to be discouraged and minimized, and at piece work no man is to receive less than he would earn at time wages. In case of any difference, to avoid disputes, the employers are to receive deputations of workmen for mutual discussion; trade union officials may negotiate with officials of the Employers' Federation, or either party may submit the matter at issue to a local conference representative of both sides, from which, failing settlement it may be carried to a conference of the central authorities of the Federation and the unions. Meantime, during all the negotiations there shall be no strike nor interruption of work.

Whatever individual opinion may be as to the desirability of such an arrangement, it is gratifying to observe that under such a plan of operation there would be recognized three principles which must be regarded as fundamental to any equitable and stable industrial system—namely, the right of man to labor independently of any arbitrary dictation; the right of employers to manage the businesses which they create, for which they provide the capital, and for which they are responsible; and the right of working men to combine for purposes of mutual advantage apart from all schemes of monopoly, odious discrimination, intimidation and violence.

Owing to the universal interest, in this country, in all methods and plans contributing to the solution of the labor problem, and as a suggestion to labor unions of the larger possibilities contributing to the security of labor which they are jeopardizing by their present policy, the agreement is herewith given in full, as adopted in 1898 and which has recently been again ratified with only a few immaterial changes.

Conditions of Management Mutually Adjusted and Agreed Upon Between The Federated Engineering Employers and the Allied Trade Unions.

General Principle of Freedom to Employers in the Management of Their Works.

"The Federated Employers, while disavowing any intention of interfering with the proper functions of Trade Unions, will admit no interference with the management of their

business, and reserve to themselves the right to introduce into any federated workshop, at the option of the Employer concerned, any condition of labor under which any members of the Trade Unions here represented were working at the commencement of the dispute in any of the workshops of the Federated Employers; but, in the event of any Trade Union desiring to raise any question arising therefrom, a meeting can be arranged by application to the Secretary of the Employers' Local Association to discuss the matter.

"Nothing in the foregoing shall be construed as applying to the normal hours of work, or to general rises and falls of wages, or to rates of remuneration."

NOTE.—No new condition of labor is introduced or covered by this clause. It simply provides for equality of treatment between the Unions and the Federation by reserving for all the Members of all the Trade Unions, as well as for all the Federated Employers, the same liberty which many Trade Unionists and many Employers have always had.

Special provision is made in the clause and in the subsequent "Provisions for avoiding future Disputes," to secure to workmen, or their representatives, the right of bringing forward for discussion any grievance, or supposed grievance.

1. *Freedom of Employment.*

"Every workman shall be free to belong to a Trade Union or not, as he may think fit.

"Every employer shall be free to employ any man, whether he belong or not to a Trade Union.

"Every workman who elects to work in a Federated Workshop shall work peaceably and harmoniously with all fellow employees, whether he or they belong to a Trade Union or not. He shall also be free to leave such employment, but no collective action shall be taken until the matter has been dealt with under the provisions for avoiding disputes.

"The Federation do not advise their members to object to union workmen or give preference to non-union workmen."

NOTE.—The right of a man to join a Trade Union if he pleases involves the right of a man to abstain from joining a Trade Union if he pleases. This clause merely protects both rights. The Federation sincerely hope that a better understanding will prevent any question of preference arising in the future, and advise the members not to object to Union workmen.

2. *Piecework.*

"The right to work piecework at present exercised by many of the Federated Employers shall be extended to all members of the Federation, and to all their Union workmen.

"The prices to be paid for piecework shall be fixed by mutual arrangement between the employer and the workman or workmen who perform the work.

"The Federation will not countenance any piecework conditions which will not allow a workman of average efficiency to earn at least the wage at which he is rated.*

"The Federation recommend that all wages and balances shall be paid through the office."

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*In reply to an enquiry as to the interpretation of this paragraph, the Employers' Secretaries, on 21st January, 1898, wrote to the General Secretary of the A. S. E., stating that the general note (appended to the explanations) which disclaims any intention of reducing the rates of wages of skilled men "applies both to time wages and to piecework earnings—in the latter case there is no intention of interfering with the usual practice of making extra payment for extra effort."

NOTE.—These are just the conditions that have been for long in force in various shops. Individual workmen are much benefited by piecework.

A mutual arrangement as to piecework rates between employer and workman in no way interferes with the functions of the Unions in arranging with their own Members the rates and conditions under which they shall work."

3. *Overtime.*

"When overtime is necessary the Federated Employers recommend the following as a basis and guide:

"That no man shall be required to work more than 40 hours overtime in any four weeks after full shop hours have been worked, allowance being made for time lost through sickness or absence with leave."

"In the following cases overtime is not to be restricted, viz.:

"Breakdowns in plant.

"General repairs, including ships.

"Repairs or replace work, whether for the employer or his customers.

"Trial trips."

"It is mutually agreed that in cases of urgency and emergency restrictions shall not apply.

"This basis is to apply only to members of the Trade Unions who are represented at this Conference.

"All other existing restrictions as regards overtime are to be removed.

"It is understood that if mutually satisfactory to the Local Association of Employers and the workmen concerned existing practices regarding overtime may be continued."

NOTE.—These Overtime conditions are precisely the conditions now in operation in various places, though in many Federated Workshops no limitation whatever exists at the present time. In many cases this will be the first attempt to regulate or prevent excess of Overtime.

4. *Rating of Workmen.*

"Employers shall be free to employ workmen at rates of wages mutually satisfactory. They do not object to the Unions or any other body of workmen in their collective capacity arranging amongst themselves rates of wages at which they will accept work, but while admitting this position they decline to enforce a rule of any Society or an agreement between any Society and its members.

"The Unions will not interfere in any way with the wages of workmen outside their own Unions.

"General alterations in the rate of wages in any district or districts will be negotiated between the Employers' Local Association and the Local Representatives of the Trades Unions or other bodies of workmen concerned."

NOTE.—Collective bargaining between the Unions and the Employers' Association is here made the subject of distinct agreement.

The other clauses simply mean that as regards the Wages to be paid there shall be (1) Freedom to the Employer; (2) Freedom to the Union Workmen both individually and in their collective capacity—that is to say, collective bargaining in its true sense is fully preserved; and (3) Freedom to Non-Unionists.

These conditions are precisely those in operation at present on the North-East Coast, the Clyde, and elsewhere, where for years past alterations of wages have been amicably arranged at joint meetings of employers and representatives of the Trade Unions.

5. *Apprentices.*

"There shall be no limitation of the number of Apprentices."

NOTE.—This merely puts on record the existing practice, and is to prevent a repetition of misunderstandings which have arisen in some cases.

6. *Selection, Training, and Employment of Operatives.*

"Employers are responsible for the work turned out by their machine tools, and shall have full discretion to appoint the men they consider suitable to work them, and determine the conditions under which such machine tools shall be worked. The employers consider it their duty to encourage ability wherever they find it, and shall have the right to select, train, and employ those whom they consider best adapted to the various operations carried on in their workshops, and will pay them according to their ability as workmen."

NOTE.—There is no desire on the part of the Federation to create a specially favored class of workmen.

Provisions for Avoiding Disputes.

"With a view to avoid disputes in future, deputations of workmen will be received by their Employers, by appointment, for mutual discussion of questions, in the settlement of which both parties are direcly concerned. In case of disagreement the local Association of Employers will negotiate with the local officials of the Trade Unions.

"In the event of any Trade Union desiring to raise any question with an Employers' Association, a meeting can be arranged by application to the Secretary of the Employers' Local Association to discuss the question.

"Failing Settlement by the Local Association and the Trade Union of any question brought before them, the matter shall be forthwith referred to the Executive Board of the Federation and the Central Authority of the Trade Union; and pending the question being dealt with, there shall be no stoppage of work, either of a partial or a general character, but work shall proceed under the current conditions."

NOTE.—A grievance may be brought forward for discussoin either by the workman individually concerned, or by him and his fellow-workmen, or by the Representatives of the Union.

In no instance do the Federated Employers propose Conditions which are not at present being worked under by large numbers of the Members of the Allied Trade Unions.

The Federated Employers do not want to introduce any new or untried conditions of work, and they have no intention of reducing the rates of wages of skilled men.

These Conditions with relative Notes are to be read and construed together.

Scarcely Tenable in America.

It will instantly be recognized that any collective bargaining resulting in such an agreement in this country is scarcely tenable. The unions seem to be impressed with the conecption that in order to accomplish their unreasonable aims they must resort to such drastic measures as can find no support in law or in equity. As a result a spirit of hostility is being engendered that is fast challenging among employers the unions' very power for usefulness, and is inevitably leading to a refusal to grant any recognition to them as a factor in labor negotiations and adjustments. It is a fact that frequently unions are under the dominance of socialistic leaders who feel that their positions can be maintained only as they encourage and foment bitterness and strife, while that portion of union membership, unfortunately too frequently in the ascendency, whose wages are determined more by the unions' exaction than by individual capacity can be relied upon to blindly and unfaltering ratify whatever actions these leaders advocate.

So long as these conditions continue the necessity will exist for a united resistance to every union demand that is not based upon equity and sanctioned by enlightened judgment. Defeat after defeat must be administered until the unions realize that "kicking against the pricks" is an irritating, useless and foolhardy practice. Litigation after litigation must be prosecuted until courts recognize universally the injustice of even "peaceful picketing," since there is no such thing as "peaceful picketing," the illegality of intimidation, sympathetic strikes, blacklisting and boycotting. Such actions must not alone be prevented by injunctions, since injunctions are only restraining in influence and not punishing in design, but they must be followed whenever possible by actions for financial damages which alone can emphasize the danger of resort to such methods.

When a body of law has been built up that shall inevitably confine the actions of unions within rational and consistent lines, and a volume of precedents have been established both as a standard of judicial action, and as an encouragement to officials entrusted with the enforcement of law, then we may expect unions to be amenable to reason and ready to co-operate in the solution of the labor question on a basis consistent with common sense and humanitarian dictates. Then, and not until then, will collective bargaining become even a feasible process worthy of serious consideration.

Until that result is accomplished let it be recognized that the American Anti-Boycott Association will continue as a law and order instrumentality, especially organized, operated, and financed to deal with indefensible issues as they arise, and determined to keep constantly before the courts and the public the base principles of inequality, tyranny, monopoly and usurpation that are involved in the practices so common today on the part of organized labor.

Social Betterment.

A large number of the most prominent manufacturers of Rhode Island, including the heads of the largest machine shops, woollen mills and cotton factories, have banded together in a united effort to prevent the spread of consumption among their operatives. Rhode Island is a great manufacturing State, and its important cities and towns contain a closely-crowded population. The result, as shown by the latest figures, is that consumption carries off more than twice as many victims as all other preventable and communicable diseases combined. The newly formed league of millmen employs sanitary engineers and physicians who make constant inspections and watch each employee for signs of tuberculosis. Assistance and proper attention are provided for those who have the disease, and a campaign of education is conducted among all the operatives. House-to-house inspection of tenement districts, careful records of the removal and whereabouts of families in which the disease is present or has appeared, and the formation of a committee on legislation, are other steps which the millmen have taken. They are mentioned here because they are within the capacity of large employers of labor everywhere, and are not only humane but "good business."

The official tests on the new eight hundred kilowatt plant at Morrisburg, Ont., were made recently by Mr. Willis Chipman, C.E., and Mr. K. L. Aitken, C.E., both of Toronto.

Proper Packing of Freight for Shipment

By Charles E. E. Childers

THE main purpose for which the Traffic Club, of Pittsburgh, exists, is to promote fair-minded co-operation in all matters affecting their common interests between the railroad companies, the carriers of freight, and their patrons, the shippers. The President of the Club, at a recent banquet, declared that a man who saw only the side that affects his own greatest profit, regardless of the consideration due to the other side, was not Traffic Club stock, and was not capable of joining in an effort to improve the situation, by an adjustment fair to all.

One of the subjects which was placed in the forefront which required thorough development in this spirit of co-operation was that of the proper packing of freight before offering for transportation.

The following address on the subject was delivered by Mr. Chas. E. E. Childers:

No one is likely to dispute the fact that safety to goods should be the first consideration of all in the business of their transportation, from the viewpoint of the interest of both the carrier and the shipper, and should really take precedence over everything else. Of what avail is it to move a shipment from point of origin to destination in record time, if upon its arrival, the goods are damaged or destroyed? Yet its relative importance as compared with rapid movement and speedy delivery appears of late years to have been largely lost sight of. The carrier's energies, on the one hand, have been devoted to quick handling of traffic, and adequate supply of equipment, while the shippers, on the other hand, have been endeavoring in too many cases to meet the increased cost of their package material by the use of cheaper and flimsier package for their goods. This is all the more unfortunate, because modern conditions of transportation, and the improvements which have been introduced by the carriers, to render the best possible service, which is so vigorously demanded by the public, have carried with them a certain unavoidable increase in the risk of damage to the property transported, and there should have been in all equity a corresponding improvement in the methods of packing the commodities shipped, so as to offset this increased risk, while the reverse has in fact been the case.

In the days when emergency air brakes and automatic couplings were unknown on freight trains, and before the introduction of the heavy locomotives and high tonnage preferential trains nowadays in service on our roads, there was actually less liability than at present to injury in transit to goods loaded in cars. Yet under these old conditions, the goods were as a rule more strongly packed than to-day. The result of all this has been a great increase in the number of damage claims made against the carriers, this increase being estimated by some authorities, at as high as 50 per cent., which, in the absence of detailed specifications in the tariffs and classification as to the kind of packages to be used, they have preforce to pay. A condition of things most unjust to the carriers has thus grown up, which in the beginning might have been avoided, if shippers had only shown a disposition to meet the carriers in conference before changing the character of their packages, and a condition which now seems likely to force upon the carriers for their own necessary protection the irksome and laborious task of laying down rules in minute detail as to the kinds of packages which alone will be accepted by them for transportation for each and every commodity offered for shipment.

Carriers Partly To Blame.

It is no doubt true that many cases of damage are due to rough and careless handling by the carriers' own employees, for which, of course, under the law, they must and should be held responsible. Nevertheless I would respectfully submit that even this class of claims could be greatly diminished, if shippers would take the broad-minded view that rough handling, to some extent, is an almost unavoidable incident of transportation nowadays, and would be ready to do their part to meet it by extra care in the preparation of their commodities for shipment. The general scarcity of efficient labor, so universally prevalent in these prosperous times, is felt by the railroad companies as fully as by all other employers, and do what they can, it is impossible always to secure ideal service in this respect. In the rush and hurry of the huge volume of traffic with which railroad companies have to contend nowadays, some rough handling of the packages committed to their care must be expected, but the percentage of the damage caused thereby could be enormously reduced in very many cases, if reasonably strong, instead of unreasonably light packages had been used. I would commend this point rather strongly to the consciences of our shipping friends.

The Railroads Do Their Best.

The roads have, as a matter of fact, done their best at the expense of many million dollars, to insure greater safety of goods in cars, while being switched in the assembly and distribution yards, by the establishment of the so-called "gravity" system, in which the cars are pushed up an inclined track or "hump," cut off and allowed to run down by their own weight to the several classification tracks. Each cut of cars is manned by a brakeman, and impartial observers report, so gently and skilfully, as a rule, are the cars handled, that one might place one's hand between the bumpers as they come together and not suffer even a scratch. For the benefit of any doubting Thomases who may wish to make the test, I would suggest as a conservative measure, the use of a broom stick, spoke or like article. It's not quite so trying to the nerves, but demonstrates the point just as effectively.

That the present style and character of the packages used for shipping is at present unsatisfactory and unsuitable for railroad transportation purposes, is very positively demonstrated from reports by the local freight agents, inspection bureaux, and other observers all over the country. The following will serve as some specimen bricks in illustration of this:

Flour in paper sacks,—the quality of paper largely used at the present time in these sacks is such that piling of the flour to sufficient height in the car to load to the minimum weight, causes the sacks in the top rows to burst those in the bottom rows of the cars. Independently of the question of safe transportation, the number of times that this commodity must be handled between the mill and the consumer would necessitate the quality of the sacks used being of a superior kind to stand this frequent handling.

Crackers. tobacco, dry goods, notions, cereals and cereal products and preparations, lamp chimneys, and many other articles, formerly shipped in wood, are being packed for shipment in cases made of straw-board, wood-pulp, leather board, fibre and other analogous material, and these packages are not rigid enough or of sufficient strength to protect the

contents, or allow the proper stowing of them in the cars to meet modern transportation requirements.

The Straw Board Evil.

The superintendent in charge of one of the largest transfer stations in this district, where thousands of tons of through freight are handled every week, states that one of their greatest troubles in the way of damage to shipments, is on account of the use of these straw-board and analogous material packages, which may be of sufficient strength to stand ordinary transportation, but in promiscuous loading, such as is necessary with L. C. L. freight, will not stand contact with wooden boxes or other hard commodities. The fact is that all commodities that are liable to injury or puncture or rubbing, should be encased in tight strong constructed wooden cases. It is seldom that a car can be so solidly packed either on straight carload shipments going to one consignee or on miscellaneous L. C. L. lots, that some shifting of the load en route is not likely to occur. Directly the engine takes hold and the train begins to move, the churning process commences, and any one who has noticed a freight train moving at 20 or 30 miles an hour, and forced to come to a sudden stop, with a series of jerks and bumps, can imagine what must happen to the freight inside the cars, consisting of commodities, some of them not protected in any way from contact with the freight next to them, and others in such frail packages that the slightest concussion will break them open.

The crating of numerous articles, such as preserves and jellies in glass; wood mantels, arc light globes, machinery of all kinds, oil tanks, furniture, household goods, porcelain closets, bath tubs, sinks, oil, gas, alcohol and vapor stoves, heating stoves, and many other commodities, is constantly found to be insufficient to give proper protection to the articles, either when handled on platform or after being placed in the cars. These crates are made of inferior lumber, often not of sufficient thickness, or with an insufficient number of strips or slats to properly protect the articles.

The writer not long ago had an opportunity of personally inspecting a shipment of smoking tobacco, in process of transfer at one of our freight stations, the tobacco being put up in small paper bags, and packed in cases made of corrugated strawboard or wood pulp board, instead of, as used to be the case until quite recently, in wooden cases. Out of the hundred or more cases in this shipment, at least one-third were in bad order, the edges and corners of the strawboard cases being torn and broken open, so that it was perfectly possible to put one's hand in and take some of the contents. The cases could, without any effort, have been easily perforated with an ordinary lead pencil, and, if exposed to rain or even a damp atmosphere, become soft as pulp.

Poor Wooden Boxes Cause Heavy Losses.

Even where wooden boxes are still used, instead of the inferior substitutes named, the boxes are often of such poor quality of lumber that the nails driven into them will not hold, and the boards so thin that a very slight jar or concussion will break them open. The opinion has been positively expressed by persons in a position to know, that in 85 per cent. of the small lot shipments moving to-day, the construction of the material forming the box or crate, the size of nails, ec., is entirely inadequate to protect the contents:

Stove castings and other like cast iron articles, shipped in bundles, not crated or boxed,—a very small amount of rough handling or bumping in the car will cause these articles to break almost as readily as if they were made of glass.

Screen doors and window screens, put up in bundles, with no protection except perhaps two boards about six inches wide, and half an inch thick, running the length of the doors or screens, on each side of the bundle. This is not a proper covering, as any sharp article is liable to pierce the wire netting.

Woven wire bedsteads or matresses, shipped without any covering or protection whatever. Stove pipe elbows, shipped wired together in bundles, with no protection at all from contact with heavy boxes or other articles which would very easily damage them.

Tin plate put up for shipment in boxes made of $\frac{7}{8}$-inch material for the sides and ends, and $\frac{1}{4}$-inch stuff for the tops and bottoms, sometimes less. The sides and ends are heavy enough, but the tops and bottoms should be of at least $\frac{1}{2}$ to $\frac{3}{4}$-inch stuff. It is only fair to state that this question of the packing of tin plate boxes, after vigorous agitation on the part of the carriers some time ago, has been to a large extent satisfactorily disposed of by the manufacturers deciding to use stronger and thicker material for their boxes.

It should be borne in mind that a package sufficient for transportation requirements under certain conditions, will not be sufficient under other conditions. For instance, on short haul or local movements of L. C. L. freight in way cars, where the cars have to be loaded in station order, the fact should be recognized that there is a greater risk of damage, on account of its not being possible to make the best stowage of goods in the car, than in the case of long haul. The goods may be, and no doubt usually are, well stowed in the cars at the commencement of the journey, but as the consignments for each station are taken out, disarrangement ensues, and it is impracticable to make a restowage at each local point.

The roads in this territory receive many cars of dried fruits, such as raisins, apricots, etc., from the Pacific coast. These commodities are packed in small wooden boxes, which are quite good enough for transporting in small lots, but when, as usually is the case, the through cars are loaded in the West, tight to the roof, of 300 or 400 such boxes, the result is that the lower tier of boxes in the car is often ground into the worst kind of pulp before it reaches its destination.

An illustration of the bad preparation of commodities for shipment, as distinguished from bad packing,—complaint was recently made by several of our local freight agents, in regard to shipments of shafting and cold rolled steel. These commodities, which are not boxed for shipment, are covered with a heavy mill grease, to protect them from rust. A car will be loaded for a transfer point at the manufacturer's mill or warehouse, with several L. C. L. shipments going to various destinations. After the pieces of shafting and steel are placed in the car, a heavy coating of mill grease is poured over them to further protect them from rust. The transfer car reaches the transfer point, and the various shipments have to be taken out, and put into separate cars with other freight. Not only is the other freight, loaded with these articles, exposed to great risk of damage, by coming in contact with the greased material, but the cars in which this material is originally loaded, as well as the several cars into which the shipments are transferred, are rendered practically unfit for loading merchandise freight in, on account of the floors of the cars being saturated with heavy oil and grease from the pieces of shafting and steel.

Ice Frequently Cause of Damage.

Another bad practice, which should be put a stop to, is the loading of ice with less than carload shipments of commodities, such as beer, for their preservation en route. The ice is piled on and around the beer packages, and in warm weather the ice of course rapidly melts, rendering it very dangerous to load other miscellaneous freight in the same car, and, after the beer and ice have been taken out, making

the car unfit, sometimes for days, for the loading of other merchandise, and thus together, putting it temporarily out of service.

The question arises as to how this extremely unsatisfactory state of affairs can be remedied. The carriers have already tried to protect themselves to some extent by minutely specifying, in the use of certain commodities, the precise kind of packages in which such commodities will be accepted for shipment. In the case of eggs, for instance, about half a column of the official classification is taken up with the description of the carriers, or cases, in which the eggs must be packed, but it can be readily understood that such specifications can, without very much difficulty, or risk of detection, be evaded by unscrupulous shippers of freight.

A special rule was not long ago added to the official classification, providing that property presented to carriers packed in *so-called* boxes or cases, made from straw-board, leather, board, wood, pulp, fibre, wired splint wood, or other analogous materials, shall be charged 10 per cent. higher than the classification provided for such property. This increase in revenue, however, has proved in practice inadequate to meet the additional risk involved:—even if it was, the object to be sought is securing immunity to the goods from damage, and not merely an insurance to the carriers against the results of such damage,—and it seems probable that the rule will have to be changed so as to require that property, packed in cases of the kind described, must also be substantially crated or boxed.

There is also a general classification rule in effect on our roads in this territory, under which the carrier reserves the right to refuse shipments in insecure packages. This again does not work out satisfactorily, for the reason that, while the agent at one station may not consider a package secure, and decline to receive it, his colleague at another station, possibly on the same road, may be more liberal in his views, and in this way a discrimination between different shipments of precisely the same property would be created, such as cannot be defended under the present law.

If it is upon rules of this kind that the proper packing and preparation of freight is to depend, it will become necessary for the carriers to specifically describe in the classification and tariffs the exact kinds of packages in which each and every commodity must be offered for transportation. It would require a large force of experts to determine this, and the classification books will become volumes of such encyclopedic size that the average freight agent would find life too short to study them, to say nothing of trying to apply each of their complicated rules to all the shipments offered to him.

I would respectfully submit that it is to the shipper himself that we must look for the proper and adequate remedy. He knows or should know perfectly well, without the assistance of experts, just what kind of package will safely carry his freight and, if he would only use his conscience in the



Canada's Exhibit at Dublin Exhibition

matter, and deal with the carrier in the same way as he expects to be dealt with, there need be no further trouble, and the commodity can continue to be provided for in the classification "in boxes," "crates," or what not, or even simply "in packages," without any fear that undesirable packing of the articles, for economical or other reasons, will be the result.

Standard Shipping Box Often Inadequate.

It is not apparently in all cases from motives of economy that these inferior packages, *i.e.*, inferior from a transportation point of view, have of late years come into use. The practice has grown up, quite praiseworthy in itself, so long as no undue hardship is placed on the carrier, for the manufacturer to himself provide for certain kinds of commodities a package in which the goods can remain until they reach the final consumer, of a quality which will be both attractive and useful to the latter. Take the case of the familiar Mason fruit jar, for example; in the old days, the glass manufacturer would put these jars up for shipment to the jobber or dealer in a large, strong and substantial packing box, placing in the box as many jars as he could, stuffed in tight with prairie grass, hay and material of that kind. This made an excellent package for railroad transportation, but when it reached the jobber, or dealer, would be discarded by him, and the consumer who finally purchased the goods over the counter of the retail dealer, would take the jars home under his arm, wrapped in paper probably. Nowadays the manufacturer puts these jars up in small numbers, say a dozen to each case, in a fragile package made of veneered stuff —the whole designed to answer the purpose of a neat and attractive package as a carrier from the factory to the jobber, thence to the retailer, and finally to the user or consumer, but very little, if any, consideration is given to protecting the jars from injury while in transit on the railroad. This practice has not been extended to export shipments, which are still, to meet vessel requirements, put up in substantial cases. It seems a pity, by the way, that some happy medium could not be arrived at, under which, in the case of either export or domestic shipments, a package which should be attractive to the ultimate purchaser and at the same time strong enough for railroad transportation purposes, should not be devised and put into use. On the one hand, we have domestic shipment, in which the feature of strength is sacrificed to that of attractiveness to the customer, while in the case of export shipments the reverse is the case. It is an unfortunate fact that in the markets of the world the American manufacturer bears a very bad reputation for the way he puts his goods up, with little or no regard to the tastes, prejudices if you will, of the customers he is seeking to secure in foreign countries. The Germans have set an object lesson to the world about this, the goods they ship to foreign markets being as far as possible in every respect made to conform with the wishes of the customer. Until our American manufacturers recognize the importance of this fact, they will not make much headway in competing in the open door markets with their foreign rivals.

The Real Blame Rests on the Shipper.

In the case of domestic shipments, our shipping friends ought surely to pay more attention to the safety of their goods in transit than they are doing now, if only in their own exclusive interest. Manufacturers of wooden boxes state that there is no foundation for the fear that the supply of lumber will give out, which has prompted so many shippers to look around for other substitutes for their packages here.

It would certainly pay the manufacturers to use a box strong enough to carry their goods safely as much as it pays to use a box which will show the goods off to the best advantage. A box half fallen apart, with the goods exposed, and probably damaged on its arrival at destination, gives the merchant receiving it about the same sensation as would a darky applicant for a position to sell goods over his counter, whose arms were out of the elbows of his coat, and whose feet were out of the toes of his shoes. But, under conditions as they at present prevail, it seems as though the majority of shippers care not a jot what kind of an old thing they dump upon the carriers, so long as they can secure a clean bill of lading for it, and get it off their hands. Gentlemen of the Traffic Club, this is bad business, bad for the shipper and bad for the carrier. The evil is, I am glad to think, not so prevalent in the Pittsburg district as in other territories, on traffic at least originating in this section, due in part to the fact that our outbound tonnage consists so largely of raw material, not package freight, and in part also, I feel confident, because a better understanding and a desire for co-operation between the industrial and railroad interests exists here than elsewhere. The most frequently observed cases of bad packing are on inbound shipments, and through traffic passing here, but the conditions are bad enough as it is everywhere, and if our Club can do anything in the way of creating a public sentiment, so as to lead those responsible for the evil to see the error of their ways and mend them, our consideration of the subject will not have been in vain.

The Production of Asbestos.

Commercial asbestos includes two distinct types of fibrous minerals. The term asbestos was originally applied to actinolite or tremolite, but the more important asbestiform mineral is the fibrous variety of serpentine, known as chrysolite. This variety is always associated with serpentine, which is derived from the alteration of eruptive rocks. It has been reported as occurring in commercial quantities in Massachusetts, Vermont, North Carolina, Wyoming, Arizona, Washington, Oregon and California.

The eastern townships of the Province of Quebec furnish the greater part (85 per cent.) of the world's production of asbestos. In 1906 Canada exported 59,864 tons of asbestos, valued at $1,629,257, most of which went to the United States. Improved methods of mining are being introduced in Canada and the output is increasing.

Both forms of asbestos are applied to many uses, depending in part upon the fibrous character of the material, but also upon its non-conductivity of heat and electricity. The best grade of chrysolite fiber is spun into thread, yarn and rope, and woven into cloth. The yarn is largely used for packings and the cloth for theatre curtains, while fabrics containing asbestos woven with other fibres are made into various household articles in which heat insulation rather than fire-proof character is required.

Asbestos is extensively used for plastering and for making lumber that is employed in buildings where insulation against fire and electricity are desired. Its use in fireproof structures, and especially to envelop electrical conductors, is constantly increasing.

The output of all existing asbestos mines is insufficient to supply the demand for this product, and the leading manufacturing firms interested in the industry are diligently searching for new deposits.

An item in the August issue of INDUSTRIAL CANADA, which stated that the factory of the Jeffrey Manufacturing Co. was now open in Guelph, was incorrect. The Jeffrey Manufacturing Co.'s plant is located in Montreal. The news item was confused with an announcement of the opening of the factory of the Gilson Manufacturing Co. in Guelph.

Among the Industries

The Imrie Printing Company, Limited, of Toronto, have moved to larger premises at 70-72 York Street.

The Canadian Condensing Co. has been organized, with a capital of $50,000, with head office in Chesterville, Ont.

The Port Stanley Elevator Co. will erect a series of elevators at Winnipeg, Fort William, and other cities in the West.

The Record Stove and Furnace Co., with a capital of $40,000, will carry on business in Canada, with Winnipeg as headquarters.

The cigar factory of A. & I. Isaacs, St. John, N.B., was partially destroyed by fire during the month. Ample insurance was carried on both the stock and building.

H. H. Dryden, Limited, Sussex, N.B., have bought land in that town, and will build a large tinware factory there. The site provides excellent shipping facilities.

Contracts have been let for the immense steel bridge on the C. P. R. line at Lethbridge, Alta. This bridge will be one of the biggest in Canada. It will cost about $1,500,000.

The Library Bureau of Canada, whose factory was destroyed in the recent Edwards fire in Ottawa, have secured another site in that city, and will erect a new building shortly at a cost of $30,000.

The Cascapedia Trading Co. will erect shingle and pulpwood mills and dry kilns at Dalhousie, N.B., at a cost of a million dollars. This company owns 1,700 miles of timber limits in Bonaventure County, Quebec.

An electric smelter in Ottawa seems now an assured fact. The company who have been promoting it have the machinery ordered, and it is expected that work will begin on the plant within the next three or four weeks.

The Benson Lumber Truck Co. have been incorporated with a capital of $20,000. They will manufacture farm and lumber machinery and the patented Benson truck. Their place of business is Port Arthur.

Plans have been approved for the new $1,500,000 Grand Trunk Depot at Ottawa. The structure, besides being a thoroughly modern railway station, will be an office building. It will be ten storeys in height and of handsome architecture.

The Red Cliff Brick Company is erecting a plant four miles from Medicine Hat, Alta. The company is capitalized at $150,000, and a thoroughly modern works is being built. The capacity of the plant, when completed, will be 60,000 bricks daily.

A plant is being established at Ottawa for making pulp out of spruce and hemlock refuse. The Ottawa Pulp and Paper Co. has been formed to carry on the work. The process is a new one and will be superintended by the inventor, W. U. Cornell.

The Government recently, on the application of James Friel, of Dorchester, decided to grant the N. B. Petroleum Co. a lease of ten thousand acres of land in the eastern part of the province, subject to the restrictions provided for in the Act. The company is required to spend $20,000 per year in prospecting and development work, and Mr. Friel pointed out that $200,000 had been expended in this manner. It is proposed to continue the work on a greater scale than ever.

The Borden Milk Co., of New York, are negotiating with the corporation of Woodstock, Ont., with a view to establishing a plant there for condensing milk. The plant will cost $100,000. It is expected that the deal will go through satisfactorily.

A cutlery firm of Bradford, Pa., are negotiating for the purchase of a factory in Stratford, Ont. If the deal goes through they will install a plant at a cost of $75,000. They ask the municipality to guarantee their bonds to the extent of $30,000.

The Standard Sanitary Manufacturing Co., of Pittsburg, have become incorporated in Canada. By an order-in-council their name has been changed to the Sanitary Manufacturing Co. The capital is fixed at $250,000, and the place of business, Montreal.

The Canada Woodenware Co., whose factory at Hampton, N.B., was destroyed by fire recently, will build a new factory in the near future. At present Chatham, N.B., is favored as a site for the industry. Strong inducements have been offered by that municipality.

A press report, which so far has not got past the stage of a rumor, has it that the Canadian Government will open an office in a central position in London, to serve as a bureau for Canadian products. Mr. Fielding is said to be carrying on negotiations towards this end.

Announcement is made that the business heretofore carried on under the name of J. Arthur Paquet will be continued by the Paquet Company, Limited. The business will continue under the management of Mr. G. A. Vandry, who has brought it to such a high state of excellence in the past.

The Eagle Knitting Company, of Hamilton, is contemplating the erection of another large factory. The establishment will cost in the neighborhood of $75,000. The new building will have a frontage of sixty feet on East King Street, and will have a depth of 200 feet on Sanford Avenue. It is to be five stories in height, and contain all the latest improvements in knitting and spinning appliances. The walls will be of reinforced concrete. It is estimated that the new factory will give employment to over a thousand people. The plans have all been drawn up and a start can be made at any time on the factory.

An association has been formed in Scotland, under the name of the Scottish Products and Industries Association, having for its object the development of a market in London for the products of Scotland. The originators of the enterprise estimate that there are 10,000 Scotsmen in London who would be glad to buy their native goods. The association aims at opening a store in London where all goods produced in Scotland and suitable for that market will be kept. It is felt that such a store would be financially possible besides giving a great impetus to the goods sold.

Situations Wanted

NOTE.—For further particulars regarding any applicant mentioned below, apply by number to the Secretary at Toronto, stating wages, whether work will be permanent, and giving such information as you think advisable. For all help secured through this medium, our regular Labor Department charges will be made.

Brass Workers.

1 **Fitter and Turner.**—Liverpool man, married, with considerable experience on a lathe, in brass and iron work, well up in hand turning and cutting, wishes employment in his trade in Canada. Has also had some experience at steam-fitting and electrical work. Good references.

2 **Moulder.**—Young Scotchman, seven years' experience in locomotive works as a brass moulder, is anxious to come to Canada. Union man, good references.

3 **Brazier and Tube Maker.**—Young married man who has worked nine years in large band instrument makers' shops, wants position as a metal worker, brazier or tube maker in Canada. Has had long experience at brass and copper work, and can run a lathe. Is member of union not represented in Canada.

Carpenters and Joiners.

4 Young married Englishman with considerable experience as a **Shop Fitter,** and qualified to take a position as general foreman in any carpentering work, wants position in Canada. Good references, non-union.

5 Young man, single, with six years' experience in a builder's work shop, competent **Carpenter and Joiner,** wants work in Canada. Non-union, and good references.

6 **Cabinet Maker.**—Who has been working for years in London, England, with a mantel and looking-glass manufacturer, is anxious to communicate with Canadian manufacturers who can give him employment in his trade on arrival in Canada.

126 **Picture Frame Joiner.**—Young, married Englishman, with 11 years' experience in the moulding and picture frame trade at very fine work, wants position in Canada. Has worked on oak and white wood fancy mouldings and general fitting. References, non-union.

Compositors.

7 **General Letter Press Printer.**—With 20 years' experience in a first-class English office, wants position in Canada in printing office. Has knowledge of machine ruling, die stamping, office work, etc. Married, union, and excellent testimonials.

8 **Music Compositor and Monotype Operator.**—15 years' experience in American and English houses, wants position in Canada. Former union man, married, with good references.

9 **Machine Minder.**—Young man with four years' experience in printing shop as machine minder. Non-union. Would come to Canada if he could secure position at his trade.

Engineers.

10 **Engine Driver and Fitter.**—Young Englishman, married, with thorough experience with locomotive, traction engines and steam cranes, etc., wants position in Canada. Non-union, good references.

11 **Locomotive or Crane Driver.**—Young Englishman, single, with several years' experience with Great Western Railway Co., wants position in his trade in this country. Non-union.

12 **Engine Driver.**—Married Englishman coming to Canada wants position as engine driver here. Has had 14 years' experience at driving and stoking in the Old Country, and is accustomed to all kinds of engines, dynamos, etc. Non-union.

13 **Marine Engineer.**—Young Welshman, single, who has served his apprenticeship as a marine engineer, wants position at marine or any general engineering work in this country. Has had experience at repairing, improving and tool-making, and is thoroughly qualified at every branch of the trade. Excellent references. Non-union.

14 **Marine Engineer.**—Londoner, married, with long experience with marine engines and boilers on all kinds of steamships, wishes to secure employment in Canada ; is thoroughly qualified to run any engine or locomotive, and is a good, handy man with machinery of all kinds. Non-union, and splendid references.

15 **Marine Engineer.**—Young Englishman, single, with 12 years general engineering experience, 5 years with the Taff Vale Railway and 7 years' marine experince, the last two as chief engineer, would like a position in Canada. Holds a first-class Board of Trade certificate. Non-union and excellent references.

16 **Mechanical Engineer Foreman.**—Young Englishman with 8 years' experience at general engineering work, during part of which time he supervised the work of others, wants position in Canada. Would make a good handy man for any factory as a general repairer of machinery and tools. Non-union and good references.

17 **Mechanical Engineer.**—Englishman with 14 years' experience with hydraulic machinery and gas engines, and considerable general engineering experience, wants position in Canada. Has served some time as an engine erecter and millwright. Testimonials on request. Non-union.

20 **Mechanical Engineer** with 20 years' experience on all classes of engines, marine and stationary, accustomed to all kinds of work around machinery, with good testimonials, wants a position in an engineering establishment in Canada. Excellent references. Non-union.

127 **Draughtsman.**—Young, single Englishman, with 9 years' experience in first-class English machine works, who has served his apprenticeship at fitting, turning, planing, etc., in the shop, wants position in good engineering firm as draughtsman. Has a thorough practical knowledge of machinery. Non-union.

128 **Architectural Draughtsman, Surveyor,** etc.—Married Englishman, with 17 years' experience as a draughtsman and clerk of works in large English engineering and construction firms, wants position in Canada. Excellent references and a thoroughly competent man, capable of taking charge of large construction. Non-union.

143 **Engine Driver.**—Young married Englishman with eighteen years' experience at his trade with Midland Railway Co., wants position of this nature in Canada. Fully competent man. Can furnish best references. Non-union.

Electricians and Electrical Engineers.

32 **Telephone Electrician,** with 4 years' experience as a general electrician in the telephone and switch-board department of a Liverpool firm, wants position in Canada ; is competent to instruct operators and at general repair work.

33 **Scientific Instrument Maker.**—Middle-aged widower with life experience in the making of electrical instruments, and other high-grade scientific apparatus, wants position in Canada. Has some knowledge of optical instrument making, and has worked for the best English firms. Member of the Mathematical Instrument Makers' Society.

34 **Electrical Engineer.**—Young Englishman with first-class technical training, and a thorough practical experience at all kinds of electrical engineering work in the best English establishments, wants position as supervisor in large Canadian electrical engineering works. Has served as chief works assistant in good English house, and is thoroughly competent to take charge of men. Excellent testimonials.

35 **Electrical Fitter.**—Englishman with thorough knowledge of switch-board and dynamo work, wants position as an electrical fitter with a good firm in Canada, good references, thoroughly competent. Non-union.

144 **Electrical Engineer.**—Young single Englishman, with ten years experience in electrical work in all its branches, specialist on instruments, worked in best English houses, wants position in Canada. Non-union. References.

145 **Electrician.**—Young married Englishman, with ten years' experience in general electrical work, wiring, etc., a specialty, wants position in Canada. Non-union. References.

146 **Electrical Engineer.**—Young single Englishman with over ten years' experience as a general mechanic and electrician is open to take work in Canada. Non-union. Good references.

Fitters and General Mechanics.

42 **Fitter and Turner.**—Young Englishman with 7 years' experience as an engine fitter and turner in first-class English works. Good knowledge of high-grade engines, wants position in engine works in Canada. Good references. Member of Amalgamated Society of Engineers.

43 **General Fitter,** with 10 years' experience gas and waterworks, and considerable knowledge of engineering, wants position in Canada. Has worked as locksmith. German by birth, with excellent references. Non-union.

44 **General Fitter.**—Young Englishman who has served apprenticeship in good English works as engine fitter, wants position in Canada. Has a general knowledge of engineering work and repairing. Can furnish good references. Non-union.

45 **Engine Fitter.**—Englishman with 15 years' experience as engine fitter, 3 years of which were spent in Africa, wants position in large engine works and locomotive shops. Non-union. Excellent references.

46 **Engine Fitter and Turner.**—Young Englishman with good technical training and considerable experience on locomotives, having been engaged in building and erecting them in all branches, wants position in Canada. Is a thoroughly competent man, and has some knowledge of marine engines. Served his time on the Great Western Railway. Member of Amalgamated Society of Engineers. Good references.

47 **Steam Fitter.**—Middle-aged Englishman with life experience at the plumbing trade, and practical experience as a tinsmith, sheet zinc and iron worker, wants position in Canada. Was formerly a member of the British Army, serving in the Royal Engineers, during which time he was employed as foreman of works. Has certificates for building construction and levelling. Non-union. Good references.

48 **Fitter and Turner.**—Young married Englishman, with 16 years' experience as a general machine fitter and repairer, wants position in Canada. Has a thorough knowledge of textile, brewery and dyeing machinery. Would be a handy man around any factory as a general machine repairer. Non-union. Good references.

49 **Fitter.**—Young man who has served his time as fitter in a tramway company in Wales, and has a thorough knowledge of machinery, wants position in Canada. Non-union. Good references.

50 **Fitter.**—Young Englishman, married, intending emigrant to Canada, wants position as steam fitter in this country ; total abstainer ; industrious and willing.

51 **Plumber and Sanitary Engineer.**—Middle-aged Englishman, married, with 26 years' experience at the plumbing trade, would come to Canada if he can secure position. Non-union. Good references and a thorough knowledge of his trade.

140 **Factory Mechanic.**—Young married Englishman, with thirteen years' experience as general mechanic in English factory, wants position in Canada. Reference. Non-union.

Machinists.

52 **Milling Machinist.**—Young Englishman with 8 years' experience as milling machinist, with good English firms, wants position in Canada. References. Member of the Amalgamated Society of Engineers.

53 **Machinist.**—Young married Englishman with 16 years' experience in engine works at slotting, planing and drilling machines, wants position in Canada. Union man.

54 **Telegraph Machinist.**—Young man with 4 years' experience in the Government telegraph works at repairing apparatus in the stores department, wants position in Canada. Good references. Member of the Stores' Association, G.P.O., England.

55 **Machinist.**—Married Englishman with 17 years' experience in the British naval dock yards at milling, shaping, boring, drilling and screwing, is anxious to come to Canada if he can secure a position in his trade. Can secure good references. Non-union.

56 **Shaper and Planer.**—Young married man with 18 years' experience at his trade in good English works, wants position as shaper and planer in Canadian machine shop. Union man and can secure good references.

57 **Hand Miller.**—Young married Englishman with 14 years' experience at his trade, who has worked all classes of milling machines, horizontal and vertical profiling and slot drilling, with some experience at fitting, wants to come to Canada if he can secure work at his trade. Has references. Union man.

58 **Roll Turner.**—Young married Englishman with 20 years' experience as round turner in large iron works in England, who has served 7 years as head foreman in rolling mills, would come to Canada if he can secure good position. Non-union. References.

59 **Scale Fitter.**—Young Englishman with 12 years' experience as scale and weighing machine fitter, with some years' experence at the bench, wants position in Canada. Non-union.

60 **Metal Polisher and Nickel Plater.**—Young Londoner with 4 years' experience at his trade, working on bicycle parts and brass fittings for phonographs, would come to Canada if he could secure work. Non-union. References.

61 **Galvanized Sheet Iron Worker.**—Englishman, married, with life experience as a maker of galvanized iron goods, such as buckets, baths, water cans, etc., would come to Canada if he can secure position at his trade. Good references, sober and industrious. Some knowledge of the windmill business.

63 **Iron and Steel Sheet Roller.**—Middle-aged Englishman, married, with 20 years' experience in large English mills, accustomed to wide and narrow rolling of all thicknesses, wants position as sheet roller in Canada. Non-union. References.

141 **General Machinist and Blacksmith.**—Young English mechanic, with some years experience as a machine tool smith and general mechanic, would migrate to Canada if he could get work. References.

124 **Linen and Cotton Handkerchief Warehouseman.**—Young, single Englishman, with 9 years' experience in large linen and cotton warehouse in Manchester, in the handkerchief branch, wants position as shipping clerk in Canadian house. Non-union.

105 **Clay Moulder.**—Young man, married, with 8 years' experience as a chimney-top maker, and a thorough knowledge of the clay moulding and glazing business, wants position in Canada. Has also a knowledge of brick making. Good references. Non-union.

106 **Cloth Looker.**—Young married Englishman, with 16 years' experience in the employ of a bed quilt manufacturer, well versed in all that pertains to the woollen and cotton business, wants position in a Canadian factory or warehouse in his line. Good references. Non-union.

Miscellaneous.

70 **Accountant for Ship Yard.**—A competent accountant and bookkeeper, with good testimonials and long experience in large ship and engine building and repairing works in Great Britain, seeks similar work in a large Canadian establishment.

71 **Brick Maker.**—Englishman, married, with life-long experience in the manufacture of machine and hand-made bricks and tiles, is anxious to secure work in a brick and tile factory in

this country. Is accustomed to repairing brick making machinery and running engines. Has first-class references and has made a successful invention in bricking apparatus.

72 **Brick Maker or Manager for Brick Works.**—Competent man, 19 years' experience as a brick works manager and engineer in England; 40 years of age. Is anxious to secure similar position in Canada. A good, all-round man, well recommended.

73 **Bridge Plater.**—Scotchman, with 16 years' experience in all classes of bridge and structural steel work, with the best Old Country firms. Will pay his own passage to Canada if he can secure work at his trade on arrival. Can take position as foreman, and has splendid references.

74 **Brewery Worker.**—Englishman, 10 years' experience as a tun room and copperside man in the best English breweries, is anxious to secure work at his trade in Canada. Can do any general work around a brewery, and will furnish references on request.

75 **Boot and Shoe Trade.**—Young Englishman, with 8 years' experience in a boot and shoe factory in England, sober and industrious, wants position as a clicker and pattern cutter in a Canadian shoe factory. Has worked on both men's and women's shoes. First-class references.

128 **Boot and Shoe Worker.**—Young married Englishman, with nine years' experience as a clicker, and considerable general business experience in South Africa and England, would like position in Canada. References. Non-union.

129 **Iron and Steel Dresser.**—Young single Englishman, seven years' experience at trade with best Sheffield firms, wants position in Canada in metal trade. Non-union.

130 **Weigh Clerk in Colliery.**—Young single Englishman with seven years' experience in above capacity in English colliery, wants similar position in Canada. Non-union. References.

131 **Textile Designer.**—Young single Englishman with seven years experience as a designer of patterns for table-cloths, etc., and general mill experience, wants position of this kind in Canada. References excellent. A good man.

132 **Technical Chemist.**—Young single Englishman, with ten years' experience, wants position as chemist in good firm in Canada. Non-union. References.

133 **Worsted Overlooker.**—Young married Englishman, with fifteen years' experience in woollen factory, complete knowledge of all branches of trade, wants position as overlooker in cloth factory. Union man. Four years as foreman of works. References.

134 **Fancy Worsted Cloth Designer.**—Young single Englishman, with three years' experience as designer, wants similar work in Canada. References. Non-union.

135 **Metal Polisher.**—Young married Englishman, with fourteen years' experience as iron and brass polisher in good English factories, chiefly on electric car work, wants position in Canada. Non-union. References.

136 **Mineral Waterworks Manager.**—Young married Englishman, with over ten years' experience in above capacity, and considerable general experience with all kinds of machinery, dynamos, etc., wants position in Canada. Non-union. Good references.

137 **Leather Worker.**—Young Englishman, with some experience as a leather worker, would come to Canada if he could secure work at his trade.

138 **Upholsterer.**—Middle-aged married Englishman, with life-long experience at his trade, wants position in Canada. Good references. Non-union.

139 **Gardener and Cook.**—Middle-aged Englishman and his wife, desirous of emigrating to Canada, would be glad to work for some Canadian manufacturer. Husband is a good gardener and handy man either around a residence or factory, wife an excellent cook and laundress. Excellent testimonials, and seem altogether a desirable couple.

76 **Cheesemaker.**—Englishman, with thorough knowledge of the cheese-making business in England, wants to come out to Canada and obtain employment in his trade in this country. References on request.

77 **Architect.**—Young Englishman, with 10 years' experience at drafting and general surveying work in Kimberley, South Africa, wants position in Canada. Non-union. Splendid testimonials.

78 **Paper Warehouseman.**—Young Londoner, with 6 years' experience as warehouseman, in large London firm of paper dealers, well up in all lines of paper, wants position in Canada. Good references. Non-union.

79 **Clothing Warehouseman.**—Young Scotchman, with 7 years' experience in shipping department of a large Glasgow wholesale clothing house, well up in checking, measuring, etc., classing and testing yarns, wants position in Canada. Non-union. Good references.

80 **Dyer.**—Young married Englishman, with 16 years' experience as foreman dyer of pieces, wool and rags; 22 years in the employ of one firm, wants to come to Canada if he can secure similar work. Non-union and first-class testimonials.

81 **Bleacher and Dyer.**—Young married Englishman, now residing in Portugal, with 16 years' experience in dyeing works, and a thorough knowledge of dyeing and bleaching in all its branches, has been in charge of the finishing and shipping room at the Oporto branch of a large English firm for some years, and is fully qualified in every particular. Good references. Non-union.

82 **Analytical Chemist.**—Young man with thorough technical training, graduate of a German technical institute, speaking French, German and English, wants position in Canada as analytical chemist or engineer. Member of the Society of Chemical Industry, and first-class recommendations.

89 **Lithographer.**—Young, single Englishman, with 8 years' experience in a prominent London house at his trade, and two years' experience in Canada, wants position here. Not a union man at present. References.

90 **Locomotive Fireman.**—Young Englishman, with 7 years' experience as locomotive fireman, will come to Canada if he can secure similar work. Non-union. References.

91 **Mill Board Maker.**—Middle-aged, married Englishman, with over 20 years' experience as a mill board manufacturer, 9 years as fireman of works, wants position in Canada. Non-union. Excellent references.

92 **Photographer.**—Young married Englishman, with 15 years' experience in England and America in all branches of the photographic business, specialist on commercial publishing and engineering work, wants position in Canada. Can do excellent work, will furnish samples and testimonials. Non-union. Has been in business for himself.

93 **Colotype Plate Maker and Overseer.**—Young, single Englishman, with 12 years' experience in photographic work, thorough knowledge of collotype printing and post-card publishing, wants position in Canada. Has been overseer of printing departments for 5 years. Non-union. Good testimonials

94 **French Polisher.**—Middle-aged London man, with 15 years' experience in all branches of the polishing trade, will come to Canada as French polisher, if position assured.

95 **Glass Painter and Decorator.**—Young single Englishman, with 15 years' experience in the business English houses as a glass painter, embosser and decorator, wants position of a similar nature in Canada. Has done some of the business work in London. Non-union. References.

96 **Timber Sawyer.**—Young married Londoner, with 12 years' experience as a timber sawyer in London and Australia, would come to Canada if position is assured in his trade. Non-union. References. Wants passage advanced on security of life policy.

97 **Wool Sorter.**—Young married Scotchman, with 21 years' experience in the wood business as classer, sorter and blender, both at home and in the colonies, would come to Canada if employment assured in his trade ; can take position as manager. Non-union. References.

98 **Soap Maker.**—Dublin man, anxious to come to Canada, wants position as soap maker. Has had good practical experience and can do all kinds of work.

99 **Ship Builder.**—Middle-aged Scotch ship builder, who has come through the various branches of ship-building and repairing, been manager of yards for 20 years, wants position in Canada in shipyards. Can look after men, or would start upon his own account if assisted. Non-union. Excellent testimonials.

100 **Blanket Manufacturer.**—North of England blanket manufacturer, who has run his own plant for a number of years, would like to obtain employment as a manager or foreman in a Canadian blanket house. Knows the trade from the raw material to the finished product, and is experienced in extracting wool for fine goods.

101 **Basket Maker.**—Edinburgh willow basket maker, intending emigrant to this country, wishes to obtain a responsible position with a good basket manufacturer. Is a specialist on spale work, and would be glad to start a factory of his own if assisted with some capital.

102 **Bookbinder.**—London man, with 5 years' experience at bookbinding, with a well-known London house, competent in all branches of binding, is anxious to secure work at his trade in Canada. Union. References.

103 **Chemical Maker.**—Young married Englishman, with 10 years' experience in the manufacture of nitric and hydro-chloric acid, ammonia and similar products, is anxious to come to Canada if he can secure work at his trade. Excellent references. Non-union. Will be ready to go out about the middle of July.

104 **Color and Paint Maker.**—Young London man, single, 14 years in the employment of one firm, is anxious to secure work in a paint manufactory in Canada. Is well qualified to make all kinds of colors and has a thorough experience. Non-union. Good references.

Printer and Compositors.

107 **News Jobbing.**—Compositor, with some experience on stone imposition, with good English firms, wants position at his trade in this country. Non-union. First-class references.

108 **News and Jobbing.**—Man, with some experience on Linotype matter make-up, and stone work in good English houses, wants position in Canada. References. Young, married, and non-union.

147 **Litho Tinplate Printer.**—Young married Englishman, with eighteen years' experience at his trade, would come to Canada if he could secure similar work here. Non-union. Excellent references. Samples of work, e.g., ash-trays, waiters, trays, etc., on request.

148 **Compositor.**—Young single Englishman, with fourteen years' experience at his trade in good English shops, wants position in Canada. Non-union. Good references. Good at display work.

Smiths.

109 **Drill Blacksmith.**—Young, single Englishman, with 10 years' experience as drill blacksmith in Birmingham waterworks, wants position in Canada at his trade. Non-union. Good references.

110 **Shoeing and General Smith.**—Middle-aged married man, with 27 years' experience as a general blacksmith, registered and accustomed to every branch of smith work and repair, would come to Canada if he can secure position.

111 **General Smith.**—Young man, with 7 years' experience as an angle, ship, and engine smith in the Portsmouth dock-yards, wants position in Canada. He is a fully qualified journeyman, has good references. Union man.

112 **General Smith.**—Middle-aged married man, who has worked all his life as a general blacksmith with English railways and other large plants, wants position in Canada.

125 **Foundry Blacksmith.**—Married Englishman, with 21 years' experience in engineering and general wheelwright shops, well up in all classes of steel forgings, wants position in Canada. Excellent references, non-union, and holds certificates of good conduct from the British Navy.

Watchmaker and Jewellers.

113 **Jewellers' Manager.**—Young married Englishman, with 15 years' experience in the jewellery business, wants position as manager or commercial traveller for a good house ; is well versed in the middle class trade. Non-union. Splendid references.

114 **Watchmaker and Jewellery Salesman.**—Young Scotchman, with 12 years' experience at watch and clock repairing, being in charge of whole store during master's absnce, wants position in Canada. Non-union. Excellent references.

115 **Watchmaker.**—Young man with 10 years' experience at the watch repairing trade, accustomed to turning and pivoting and general jewellery repairing, some shop experience, wants position in Canada. Non-union. Good references.

116 **Watch and Clock Repairer.**—Young man, with 9 years' experience at watch and clock repairing, wants position in Canada. Splendid references. Non-union.

117 **Watchmaker and Jewellery.**—Young man, with 6 years' experience at watch, clock and jewellery repairing and making, good at soldering and with thorough understanding of the best French and English clocks, wants position in Canada. Non-union. Excellent references.

118 **Clothing Warehouseman or Manager.**—Young, single Englishman with 12 years' experience in large clothing establishments in London, wants position as warehouseman or manager of a department in a first-class Canadian clothing house. Excellent references, good experience, and thoroughly reliable.

119 **Cloth Looker.**—Young, single Englishman, with 7 years' experience at his trade in first-class English houses, wants position in Canada. Knows the trade from the spinning room up. Is well recommended, union man.

120 **Foreman Cloth Finisher.**—Married Englishman, with 33 years' practical experience in all classes of woollens and worsteds, wants position in Canadian house. Has been manager of the cutting, scouring, milling, crabbing, etc., departments, and is a fairly competent man. Non-union, good references.

121 **Spinning Over-looker.**—Young, married Englishman, with 13 years' experience in a large English spinning mill in Yorkshire, wants position in a Canadian factory. References. Non-union.

122 **Wall Paper Block Printer and Stenciller.**—Young, single Englishman, with 8½ years' experience at his trade, wants position in Canada. Is an expert at wash and body color printing, and knows stencil cutting.

123 **Tailor and Cutter.**—Married Irishman, with 21 years' experience at his trade, 14 years as a master cutter, and a good knowledge ladies' tailoring, wants position in Canada. Non-union. Excellent references. Holds diplomas for his work.

142 **Silversmith.**—Married Englishman, twenty years' experience at his trade, well up in all departments, having served as foreman for several years in good English house, wants position in Canada. Non-union. First-class references. Specialist on candlesticks, church work, etc.

149 **Watch Case Maker and Repairer.**—Young married Englishman, with over twenty years' experience as a watch case maker and general jewellery repairer, well up in all departments, wants work in Canada. A good workman. Non-union. References.

Trade Enquiries

NOTE.—For further information regarding any inquiry mentioned under this heading or the names of inquiries, apply by numbers to the Secretary, at Toronto.

59 **Agent.**—Gentleman with long experience in buying and selling, selling goods as manufacturer's representative, wishes to hear from Canadian firms open to appoint an agent in **London, England.**

60 **Agent.**—Well-known **Belgian** Commission house seeking to widen its connection in Canada desires to hear from Canadian exporters who want representation there.

61 **Agent.**—Well-known **Buenos Ayres, South America**, export and import commission agent desires to hear from Canadian exporters of sheet iron, roofing material, hardware, metal goods, leathers all kinds, chemicals, paints, perfumes, gloves, papers all kinds, textiles, etc.

62 **Agency.**—An old-established and well-known firm in **Newcastle-on-Tyne** can handle any Canadian engineering or building specialty, or other marketable commodity, to advantage, and is desirous of securing the agency for such goods in the north of England. Best references furnished.

63 **Agency.—Yorkshire** firm invites correspondence from Canadian manufacturers of any new specialty in foundry equipment with a view to taking up their agency. They are also prepared to develop any improvement in machinery.

64 **Agency.—Leeds** firm is open to take up the agency for any Canadian firm desirous of developing a market for any kind of engineering specialty. Highest references given.

65 **Agency.**—An established **Leeds** firm owning commodious storage premises is prepared to take up the agency for any marketable commodity of Canadian manufacture, and asks for catalogues and other particulars from Canadian firms interested.

66 **Agencies.**—An **Italian** of good financial position, with extensive business connections throughout Italy, Germany and Austria, is prepared to take up first-class agencies for Canadian business houses, with the view of establishing relations for an import and export business. Good references are offered.

67 **Baskets.**—A large fruit farmer, who is also a large dealer in fruit, desires to get in touch with Canadian manufacturers of splint baskets, with covers and handles; handles to be on each side at top of basket. Wants 10,000 one-bushel baskets, delivery to be made early in October.

68 **Broom Handles.**—A firm in **London, England,** desires to enter into communication with manufacturers of broom handles, 50 inches by 1½ inches. What they require is the common handle chiefly used for scavenger work; price to be quoted c. i. f. London and per gross. If price is favorable, would be in a position to give large orders.

69 **Butter, Bacon, Twine, Hides, Herrings, Tobacco, Fish dried and fresh, Soap, Biscuits, Textiles of all kinds, Rice Flour, Groceries, etc.. Port-au-Prince, Hayti, West Indies,** Secretary of Board of Trade, inquires for Canadian firms who can export any of above articles to Hayti. Good references, and considerable business in sight.

70 **Cardboard.**—A **Belgian** firm desires the addresses of Canadian manufacturers of cardboard.

71 **Carriage Hardware and Woodenware.—West Australian** merchant seeks to purchase these goods in Canada. New York references and payment.

72 **Chair Legs and Fronts, etc.**—A firm in **London, England,** desires to enter into communication with manufacturers of chair legs and fronts, also chair reeds or dowels of the following dimensions; 14 inches or 42 inches x 5-8 inch and 13 inches x 5-8 inch. Lowest price c. i. f. London to be stated.

73 **Closet Seats.**—Particulars of a good opening for the sale of these seats in **Germany** may be secured at this office.

74 **Deckle Straps.—Ontario** firm (in C. M. A.) wish to purchase deckle straps for paper machines.

75 **Excelsior.**—A **London** firm invites samples and quotations of wood wool (excelsior) from Canadian manufacturers, partly for direct shipment to South Africa for the packing of fine fruits. Material must be hydraulically pressed and baled, and quotations to be accompanied by details of measurement per cwt. (112 lbs.).

76 **Flour.**—An inquirer in **Bristol** would be glad to have specifications and prices of barrels for flour from Canadian exporters.

77 **Flour.**—A **Cape Town** commission agent is desirous of corresponding with millers and exporters of flour, with a view to acting as agent for the sale of flour in **South Africa.**

78 **Fruit Pulp.**—A wholesale manufacturing company desires to be put in communication with Canadian exporters of fruit pulp.

79 **Fruit Boxes and Baskets.**—A **South African** firm of fruit dealers desires to get in touch with Canadian manufacturers of fruit boxes and baskets.

80 **Hides and Skins.**—A **North of England** firm desires to get into touch with Canadian exporters of hides and skins.

81 **Lead, Potash and Canadian Mineral.**—A **Liverpool** firm is open to buy lead and potash; also Canadian minerals.

82 **Machine Tools, Sewing Machines.—Belfast, Ireland,** wholesale machinery dealer desires to hear from Canadian manufacturers of above lines who could appoint him their representative.

83 **Manufacturers' Agent.—Berlin, Germany,** commission agent with wide experience and best connections would like to hear from Canadian exporters of interior decorations and woodwork, building specialties, novelties, etc..

84 **Manufacturers' Representative.**—A first-class **Australian** firm of manufacturers' representatives, with a large staff of travellers covering **Australia and New Zealand** four times a year, desires to hear of Canadian firms wishing to open business in those countries. Best of references, long experience. Partner will be in Ontario in September and would be glad to call on any firms interested.

85 **Mica.**—A **Hamburg** firm wishes to purchase Canadian mica.

86 **Mica and Wooden Handles.**—A **London** firm is open to buy mica and all kinds of wooden handles.

87 **News-Pulp Boards.**—An Irish firm of wholesale stationers, bag and box makers, is desirous of being placed in touch with makers of news-pulp boards in Canada.

88 **Oak Bark.**—An old-established **Hull** firm asks for prices from Canadian shippers of oak bark.

89 **Oat Offals, Oat-usk Meal, etc.**—An old-established **Hull** firm desires to get into immediate touch with Canadian brewers and malsters who can supply them with oat offals, oat-usk meal, barley dust, wheat bran, maltsprouts, brewers' dried grain, and similar commodities.

90 **Packings.**—A **London** manufacturer of packing desires to be placed in touch with Canadian asbestos mine owners, and also wishes to hear from firms in Canada who are not represented in Great Britain. **Lumber** consignments and shipments of **grain** would also be welcomed, as would also consignments of **fruit** (apples) on account of shippers.

91 **Peat Moss Litter.**—A **Tyne** firm is prepared to consider prices from Canadian exporters of peat moss litter.

92 **Pine and Spruce Boards.**—Turkish timber merchant desires to hear from Canadian shippers of lumber with a view to purchasing above material.

93 **Paper Washers or Gaskets.**—**Ontario** firm inquire for these gaskets suitable for water pipes and brass goods. Purchase in quantity for 10 days' discount.

94 **Representation.**—A **London** firm possessing facilities for exhibiting and distributing samples would like to hear from Canadian manufacturers seeking representation.

95 **Rice and Rice Meal.**—A **Bristol** firm would be glad to hear from Canadian shippers of rice and rice meal.

96 **Rubber Footwear, Shovels, Spades, Carpets and Paper Bag Machinery.**—Long-established **Sydney, Australia,** firm of manufacturers' representatives would like to hear from Canadian exporters of above lines. Will purchase in quantity for cash. Best of references in Canada.

97 **Sawmill Machinery, Saws, etc.**—**Port-au-Prince, Hayti,** firm of commission agents wish to purchase above material for customers. Saws must be suited for cutting hardwood, railway ties, etc. Want terms and catalogues from Canadian houses.

98 **Skins.**—Inquiry has been received from a firm of merchants and commission agents, **Hong Kong,** for names of exporters of skins in Canada.

99 **Soap, Vaseline, etc.**—**Montserrat, B. W. I.,** general merchant wants to purchase bar and laundry soap and crude vaseline from Canadian manufacturers. Payment cash. References.

100 **Wheelbarrows, Ice-Cream Freezers, Bench Screws, Clothes Pegs, Chair Seats, Pastry Boards, Closet Seats, all kinds Wooden Handles, Skewers.** Well-known enterprising manufacturers' selling agent in **London, England,** would like to hear from Canadian exporters of these lines. Has a new proposition for representing them, and will be in Canada in October to call on any firms interested.

101 **Wooden Pill Boxes.**—**London, England,** firm desire to purchase large quantities of wooden pill boxes. Samples can be seen at this office. Good business in sight.

102 **Wooden Handles for Shovels, etc.**—Well-known manufacturers' representative can place large orders for these goods for Canadian firms in England. Party inquiring now in Toronto, and would be glad to call on interested manufacturers.

103 **Wood Pulp, Lumber, Grain, etc.**—A **Liverpool** firm interested in Canadian business generally desires to correspond with wood pulp exporters in the Dominion who are represented in Great Britain. Lumber consignments and shipments of grain would also be welcomed, as would also consignments of fruits (apples) on account of shippers.

104 **Wooden Handles.**—A **London** firm wishes to buy all kinds of wooden handles.

Just one kind of metal shingles is good enough for any building

Divide the first cost of an Oshawa-Shingled roof by 100. The result shows the cost per YEAR—and that's the right way to figure roof cost.

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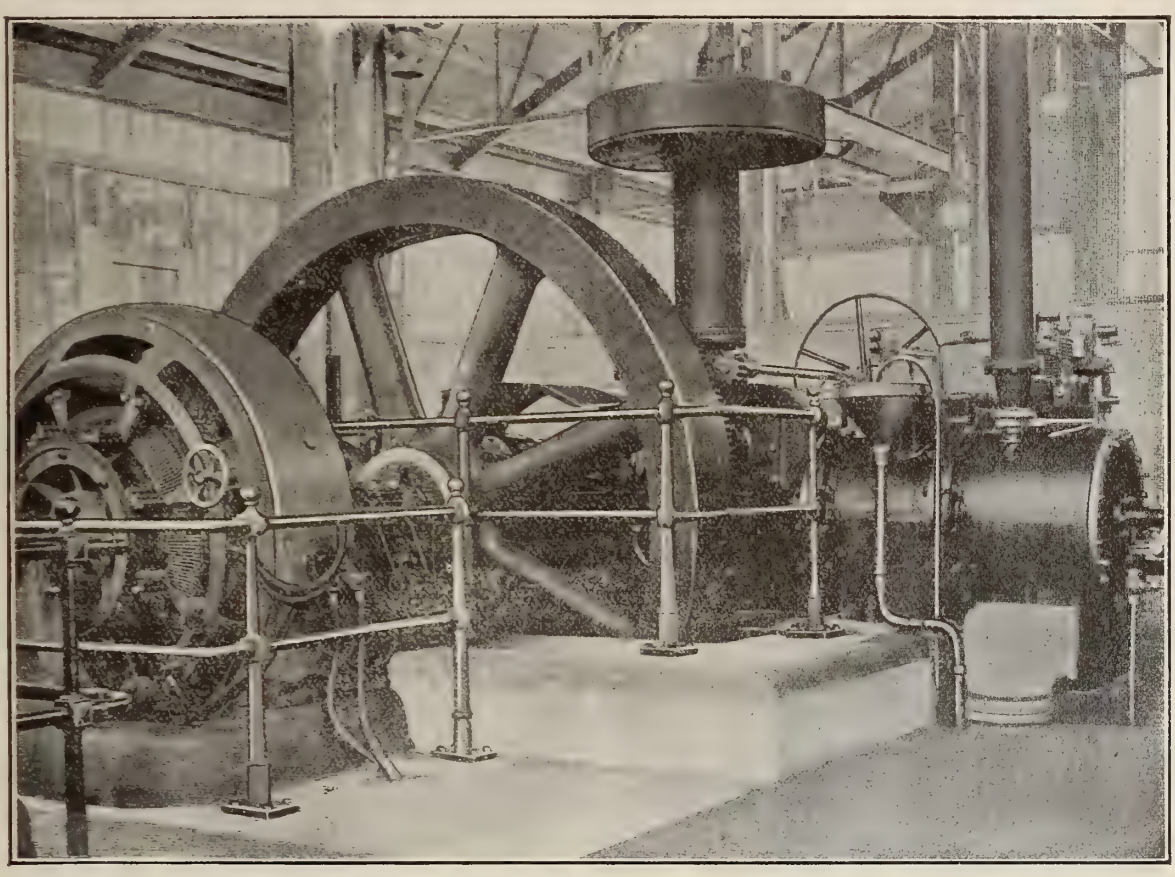
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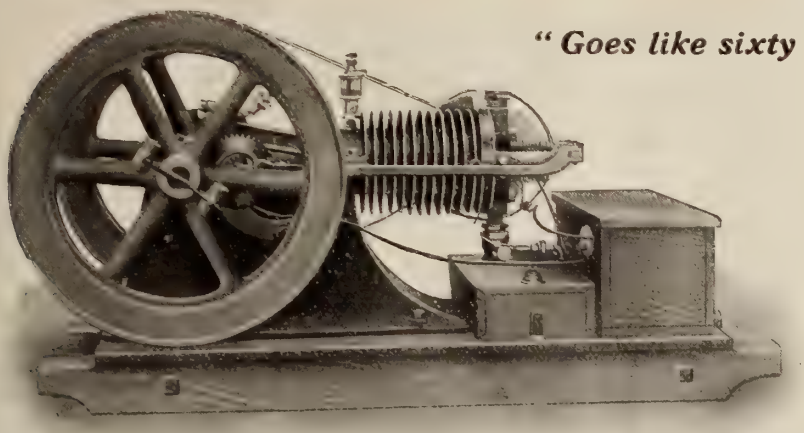
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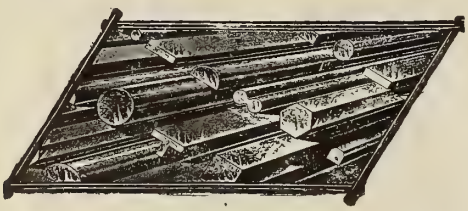
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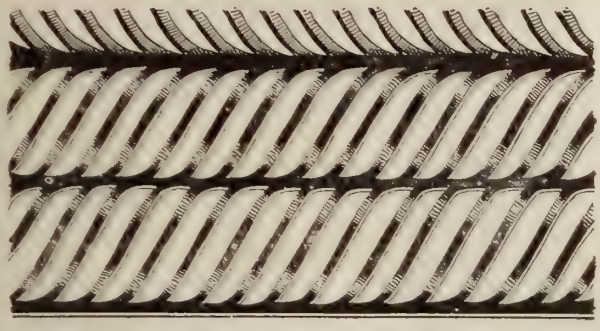
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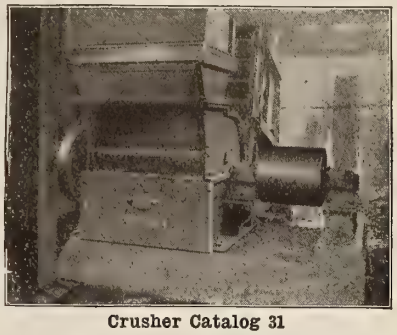


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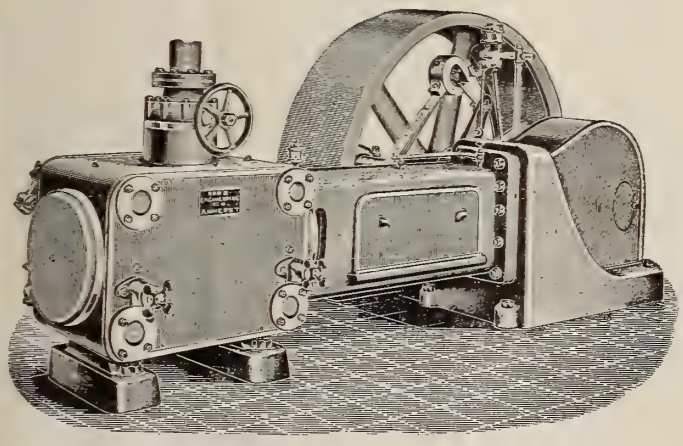
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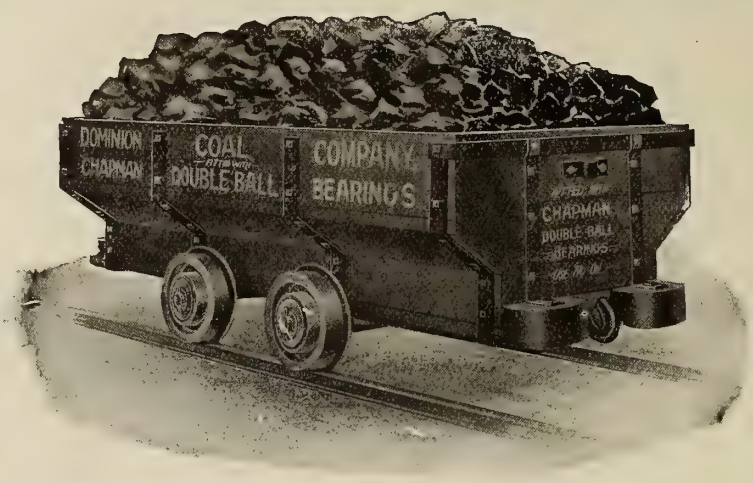
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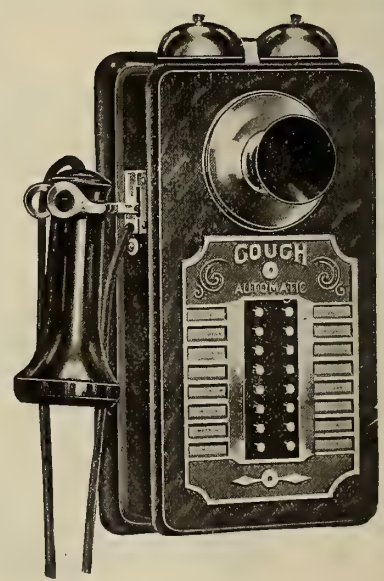
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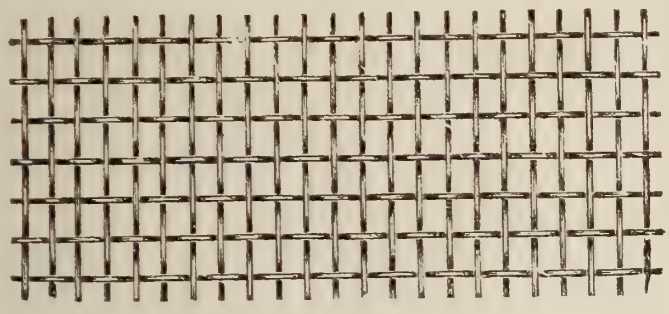
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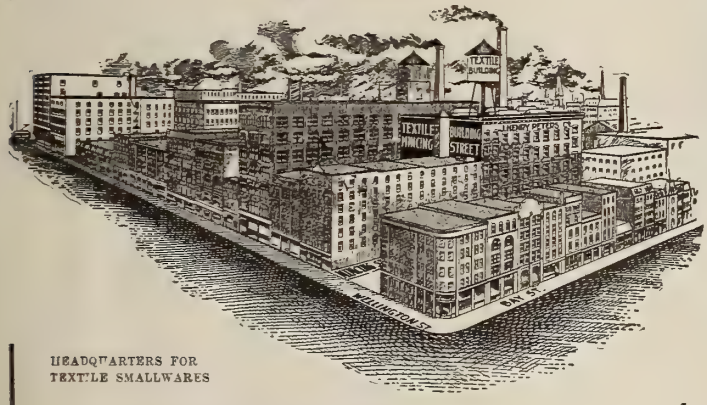
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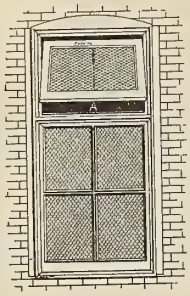


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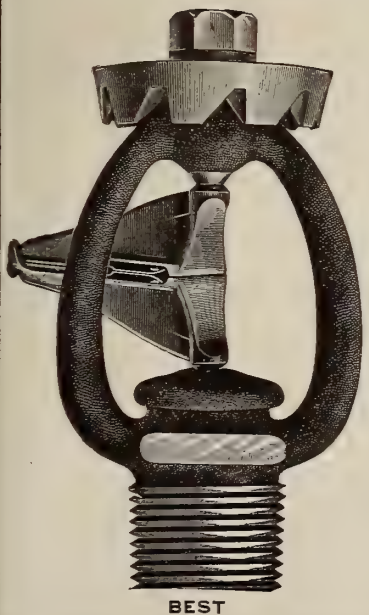
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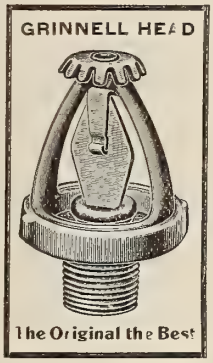
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Executive Council

THE regular monthly meeting of the Executive Council was held in the Board Room of the Traders Bank Building, on Thursday, August 15th, at 2 p.m.

The President, Mr. H. Cockshutt, occupied the chair, others present being:—Messrs. H. Bertram, Dundas; Geo. Booth, Toronto; S. B. Brush, Toronto; P. H. Burton, Toronto; R. J. Copeland, Toronto; J. W. Cowan, Toronto; John Dick, Toronto; L. V. Dusseau, Toronto; P. W. Ellis, Toronto; Thos. Findley, Toronto; H. W. Fleury, Aurora; Ed. Freyseng, Toronto; Jas. Goldie, Guelph; S. Harris, Toronto; E. G. Henderson, Windsor; J. H. Housser, Toronto; J. J. McGill, Montreal; R. McLaughlin, Oshawa; J. P. Murray, Toronto; A. Nordheimer, Toronto; J. Ransford, London; Wm. Robins, Walkerville; A. S. Rogers, Toronto; J. D. Rolland, Montreal; T. A. Russell, Toronto Junction; J. T. Sheridan, Toronto; F. J. Smale, Toronto; R. L. Torrance, Guelph; W. B. Tindall, Toronto; S. M. Wickett, Toronto.

Communications.

Communications were received as follows:—

1. From members of the Council regretting their inability to be present:—Messrs. W. C. Breckenridge, D. J. Fraser, Edward Gurney, Louis Simpson, Geo. Sweet, J. M. Sinclair, Robt. Munro, Jas. Davidson, S. W. Ewing, Esmond Peck, Thos. Roden and C. H. Waterous.

2. From the Private Secretary to the Governor-General, expressing His Excellency's thanks for the Council's invitation to be present at their Annual Convention Banquet, but regretting that previous engagements would prevent his acceptance.

3. From the Secretary of the Maritime Board of Trade, extending a cordial invitation to the officers and members of the Canadian Manufacturers' Association to attend their annual meeting, which took place in St. John, N.B., on August 21st.

Printed Reports.

Notice having been given at a previous meeting by Mr. Wm. Robins, of Walkerville, that he would move that hereafter the committee reports be printed and sent to members of the Executive Council before coming to the meeting, the motion was declared by the President to be duly before the meeting and open for discussion. At the request of Mr. Robins, the Secretary read the correspondence herein, after which Mr. Rolland explained that the committee meetings were held as close as possible to the Executive Council to oblige the Montreal members, some of whom always endeavored to get up to Toronto for them, and wait over for the Executive Council. The President outlined a few of the difficulties he saw in the way of adopting Mr. Robins' motion, though he admitted that if the plan could be worked out it would present many advantages.

There being no seconder to Mr. Robins' motion, it was finally declared lost.

Mr. J. P. Murray's motion that the names of those who sent in letters of regret be not read at the meeting, but simply published in INDUSTRIAL CANADA was then put, and being duly seconded by Mr. Ransford, was declared carried.

REPORTS OF OFFICERS.

The President referred briefly to his visit to the West, where he stated he had found members everywhere deeply interested in the work of the Association. He expressed his belief that the visits which had been made by himself and Secretary had accomplished a great deal of good by keeping the members more closely in touch with what was going on, and strongly recommended that the work be continued.

The Treasurer, Mr. Booth, read a statement showing the receipts and expenditure for the month ending July, announcing that the Association had closed its financial year with a balance to its credit of $10,273.38. He suggested that as one step towards meeting Mr. Robins' objection that the time of the meeting was taken up with needless detail, it might be well in future to have this statement typed and attached to the file of committee reports. In this suggestion the meeting concurred. The adoption of his report, moved by himself, and seconded by Mr. Tindall, was carried.

The reports of the various standing committees were then presented as follows:—

FINANCE.

The Chairman, Mr. W. B. Tindall, read the report of the Finance Committee, which recommended for payment the regular monthly accounts, amounting in all to $552.50. It endorsed a recommendation received from the Commercial Intelligence Committee, to the effect that a new lot of Made in Canada cards be issued, and offered for sale at the rate of $1.00 per dozen. It further reported the expenditure on account of the various branches for the year just closed, and where these had exceeded the expenditure authorized by the By-laws, it recommended that the surplus be approved of.

The adoption of the report, moved by Mr. Tindall, seconded by Mr. Cowan, was carried.

RECEPTION AND MEMBERSHIP.

The report of the Reception and Membership Committe presented by the Secretary recommended for acceptance ten applications, as follows:

NEW MEMBERS.

BELLEVILLE, ONT.
- The Deacon Shirt Co.—Men's shirts.

BUCKINGHAM, QUE.
- The James Maclaren Co., Limited—Sawn lumber, ground wood pulp.
- The James Maclaren Co., Limited—(R. M. Kenny, 2nd member).

DELORO, ONT.
- Deloro Mining & Reduction Co., Ltd.—Arsenic, gold and silver bullion.

GEORGETOWN, ONT.
- The Canada Coating Mills, Limited—Coated papers, coated manila cardboard.

MONTREAL, QUE.
- Merchants Awning Co., Ltd.—Awnings, tents, etc.

TORONTO, ONT.
- Spanner Novelty Wood Turning Co.—All kinds of wood turning, curtain pole trimmings.
- Thomson Engraving Co.—Photo engraving, steel and copper engraving.

TRURO, N.S.
- Eastern Hat & Cap Mfg. Co., Limited—Exclusive headgear for men and boys.

VALLEYFIELD, QUE.
- McDonald & Robb—Flour and mill feed.

WALKERVILLE, ONT.
- The Anthony Fence Co., Limited—Woven wire fence.

It referred in some detail to the Convention arrangements, and the provision that was being made for the entertainment of the visiting delegates, and concluded with the recommendation that the jurisdiction of the Toronto Branch be extended so as to include all members within a radius of fifteen miles from the centre of the city.

The adoption of the report, moved by Mr. Dusseau, seconded by Mr. Rogers, was carried.

COMMERCIAL INTELLIGENCE.

The Chairman, Mr. T. A. Russell, read the report of the above committee. It stated that satisfactory progress had been made in formulating plans for the operation of the new Department for collecting overdue accounts. Other items in the committee's report were as follows:—

Exhibition Committee.

Your Committee proposes submitting an amendment to the By-laws at the Annual Meeting to provide for the creation of a standing committee on Exhibitions, whose duty it shall be to collect and disseminate information regarding international exhibitions in all parts of the world, and to assist members with the transportation and arrangement of their displays. For convenience and to avoid duplication, it will be recommended that the committee consist of the Association's representatives to the Industrial Exhibition Association.

West Indian Agents.

A letter has been received from a member of the Association calling attention to the fact that Mr. G. Eustace Burke, one of the Canadian Commercial Agents in the West Indies, was advising the purchase of United States flour as against Canadian flour. The correspondent stated that in his opinion any agent of the Canadian Government who could not recommend Canadian produce ought to be asked to explain the reason why. This information comes to hand very opportunely, apropos of the resolution that will go forward to the Annual Meeting favoring a change in that quarter. Meanwhile, the attention of the Department of Trade and Commerce will be called to the complaint.

Australian Tariff.

Very few details are as yet to hand regarding the new Australian tariff, but such as have come to the Committee's attention indicate that Canadian trade in bicycles, automobiles and agricultural implements will suffer a severe blow. The Secretary has been instructed to enquire of the Government whether they have exhausted all their diplomacy in securing better terms for Canada, suggesting that in any event they should do their utmost to have the operation of the tariff withheld as against goods that were on their way before the announcement was made.

After moving the adoption of the report, Mr. Russell took occasion to refer to the importance of prompt and vigorous action towards protecting Canada's interests in Australia, in view of the radical changes announced in the new Australian tariff. He stated that it meant the cutting out of much of the business now being done there by Canadian manufacturers, and that no pains should be spared to secure the adoption of the preference for this country. He believed that the Association should also press upon the Government the importance of taking steps to have the operation of the tariff withheld as against goods that were actually in transit when the announcement was made. He moved that a resolution be drawn up along these lines and sent on to the Government.

Mr. Thos. Findley supported Mr. Russell, stating that owing to the large contracts now going through certain Canadian factories for goods that were being made specially to suit the Australian market, the operation of the new tariff should be withheld. Further discussion on this subject was deferred on the announcement by the President that the matter would come up later on in connection with the report of the Tariff Committee.

The adoption of the committee's report, moved by Mr. Russell, seconded by Mr. Murray, was carried.

PARLIAMENTARY.

The report of the Parliamentary Committee was read by the Chairman, Mr. A. S. Rogers. It referred to the movement that had been put on foot by the Commercial Travellers' Association to have Thanksgiving observed on Monday, instead of Thursday, and recommended that the support of the Association be lent to the movement on the understanding, however, that a preference be given to Friday as against Monday. Upon request the Chairman explained the reasons why the committee had favored Friday, but the Council felt almost unanimously that Monday would be a better day, and it was decided that the Secretary be authorized to inform the Secretary of State that the Association favored the change from Thursday to Monday.

RAILWAY AND TRANSPORTATION.

The report of the above committee was read by the Chairman, Mr. J. H. Housser. It stated that progress was being made by the railways in compiling their new tariffs, recently ordered by the Board, though it was not expected that they would be issued before the end of October. Information was also being obtained in regard to railway equipment, and would likely be in shape to report to the next meeting of the Council.

Reciprocal Demurrage.

A reference was made to some remarks of the Chief Commissioner of the Board on the subject of Reciprocal Demurrage, in the course of which he suggested that a careful investigation be made of the railways' equipment, and that as soon as it was brought up to the position where it ought to be able to handle the traffic satisfactorily, a system of demurrage charges be imposed upon the railway companies, by means of a car service bureau, which would be under Government supervision. Owing to the fact that it is not clear under the Railway Act whether the Board had power to order a system of reciprocal demurrage, the committee recommended that the matter be not pressed any further for the time being.

Other items contained in the report were as follows:—

Weights of Lumber and Track Scale Weights.

A complaint was made at the last meeting of the Executive in regard to the weights of lumber, green, partly dry and seasoned, that the estimated weights used by the railways were excessive, etc. This is being investigated.

It was also stated that in weighing, whilst the railways take care to charge for the increased weight when there is found to be an undercharge in the original billing, no allowance is made when the weighing shows the car to have been overbilled. The railways state, however, that their positive instructions to agents at scale stations are that in every instance they must insert full particulars of the weighing on the waybill, and when there is an undercharge, undercharge waybill must be issued, and when the weighing shows the car to have been overbilled the agent at destination must correct the charge to track scale weights, having regard to the proper minimum.

The Transportation Department should be advised of any cases where it is believed that the railways have failed to reduce the charges to track scale weights and where there has been an overcharge.

Discussing the report, Mr. Ransford stated that he did not think it went far enough in the matter of car weighing. He outlined the unsatisfactory manner in which the weighing was frequently done, referred to the inaccuracy of the tare printed on cars, and stated that in view of these circumstances it was very unfair that there was no appeal from the railway's own ruling. Mr. Henderson stated that he thought the only satisfactory way of obtaining relief was to have public weighers for freight cars, just as there were public weighers for all kinds of produce in the market places.

The adoption of the report, moved by Mr. Housser, seconded by Mr. Burton, was carried.

INSURANCE.

The report of the Insurance Committee, read by the Chairman, Mr. W. B. Tindall, was simply one of progress, stating that the work of securing the necessary applications for the Mutual Fire Insurance Companies was going ahead at a satisfactory rate, and it was fully expected the preliminary organization work would be completed by the time of the Annual Meeting.

On motion of Mr. Tindall, seconded by Mr. Burton, the adoption of the report was carried.

TARIFF.

In the absence of the Chairman, Mr. W. K. George, the report of the above committee was read by the Secretary. In connection with the new Australian Preferential Tariff, it recommended the adoption of the following resolution:—

Whereas, the Australian Commonwealth Parliament has recently announced the adoption of a new tariff wherein it definitely commits itself to the principle of an Imperial Preference by virtue of the concessions it has allowed Great Britain.

And whereas, Canada has not yet been admitted to the benefits of this preference.

And whereas, Its application to Canada would undoubtedly be the means of securing to Canadian manufacturers a large share of the business now being done by United States houses.

Be it resolved, That the Executive Council of the Canadian Manufacturers' Association urge upon the Dominion Government the great importance of effecting a preferential tariff treaty with Australia at the earliest possible moment upon terms that will enable her to share the advantages of that market equally with other parts of the Empire.

And Be It Further Resolved, That the Government be urged to leave no stone unturned to have Australia withhold the application of the new tariff to goods that were actually in transit at the time the tariff was announced.

The communication of the Montreal Branch regarding the leeway provided for in the Dumping Clause was thought to be a matter that should come up for discussion at the Annual Meeting.

Complaints had been received from different sources regarding faulty wording in the new tariff schedule, whereby duties were imposed on articles of a kind not made in Canada, which were plainly intended to be admitted free or at a lower rate. Since the Commissioner of Customs had no course open to him but to enforce the law as he found it, the committee recommended that the Government be asked to rectify such cases by Orders-in-Council upon proof being submitted that the real object of the clause was being defeated.

In regard to the negotiations for an extension of the Franco-Canadian Treaty, the committee stated that it preferred to defer consideration of this question until some official announcement had been made by the Canadian Government.

"INDUSTRIAL CANADA."

The report of the INDUSTRIAL CANADA Committee, read by the Secretary, referred to the satisfactory condition of the paper's finances at the end of the fiscal year. The revenue account, after making allowance for bad and doubtful debts, would show a surplus on the year's business of more than $2,500. Collections had been well sustained, there were a large number of valuable contracts on the books, and the paper appeared to be in a most prosperous condition.

The adoption of the report, moved by Mr. Wickett, seconded by Mr. Harris, was carried.

BRANCHES.

The report of the Montreal Branch was read by Mr. McGill, and that of the Toronto Branch by Mr. Freyseng, both of which will be found elsewhere.

Under the head of new business, Mr. Booth moved, seconded by Mr. Rolland, that henceforth meetings be held, if possible, in the Council Chamber of the Board of Trade.—Carried.

The President extended a cordial invitation to all the members present to attend the Convention in Toronto in September, after which the meeting adjourned.

TORONTO BRANCH.

The first meeting of the new Branch Executive took place on the 8th with an attendance of 11. There was a long agenda, and several important matters were dealt with.

Factory Extensions in Residential Districts.

The Branch will interview the Board of Control with a view of securing a permit for an extension to the factory of one of its members in a district made residential by a special by-law of this city. A permit for this extension was granted some time ago, but only on the understanding that it would be used as a warehouse. As the firm in question has occupied their present site for thirty-five years, many years before the special by-law was passed, and as the extension is being made on property they have owned during that time, the injustice of the city's refusal to grant a permit is apparent, and the Branch will make a strong fight against the city's policy of hampering the manufacturing industry in Toronto by imposing severe building restrictions.

Extensions of Branch Jurisdiction.

At the annual meeting of the Branch in July a motion was carried requesting the Executive Council to grant the Branch power to extend its jurisdiction to include Toronto suburbs. This power was granted at the last meeting of the Council.

Esplanade Question.

At a special meeting of the Branch, held on July 31st, a resolution approving of a viaduct, as opposed to an overhead bridge plan for the solution of Toronto's Esplanade problem, and the entrance of the railways was adopted. The Branch is lending its assistance in the campaign being waged to have the City Council adopt the viaduct plan.

Female Labor.

The practicability of bringing girls from Great Britain to work in Canadian factories, is being thoroughly investigated by a Branch sub-committee. There is no question but that a tremendous number of girls could be absorbed by Canadian factories if they were available, and after several conferences with the sub-committee, Brig. Howell, of the Salvation Army, is making investigations in England in this connection, while on his annual trip. As the indications are that a solution of

the problem may be worked out in this way, the Branch may take the matter up with the British Office Committee with a view of having them make a change in the arrangement with Mr. Leopold, so that the Salvation Army will be retained to bring out female help, as there is no doubt that they are in the best position to handle this class of help.

Bridge Contract.

A recent bridge contract in the City of Toronto was awarded to an English firm, no Canadian firms tendering, because of the wording of the specifications by the city, which provide that the "union and prevailing scale of wages" must be paid to all workmen engaged thereon. Canadian firms object to the word "union," and the Branch is obtaining an opinion as to the legality of the insertion of this word, which it feels is really a restriction of trade.

This question is of prime importance to every firm in Canada, and in this case the firms refusing to tender are both outside of Toronto.

Convention arrangements are complete in every detail, and the Branch hopes that it will enjoy a visit from a large number of outside members, who are particularly invited to bring with them their wives and daughters. It can promise them all a rousing convention and a good time generally.

MONTREAL BRANCH.

The regular monthly meeting of the Montreal Executive Committee was held on August 8th, with a large attendance of members. Among the matters discussed was the customs duty on aniline dyes and their ingredients. It was pointed out that while the dye itself was admitted free to Canada, a duty was imposed upon the ingredients, thus making impossible the manufacture of the dye in Canada. This matter was referred to the Tariff Committee, with the recommendation that action be taken upon it. Mr. J. Russell Murray appeared before the Committee in regard to the improvement of Canadian trade with the West Indies.

During the month delegations from the Branch have waited upon Hon. Lomer Gouin in regard to labor in the Province of Quebec, and upon Hon. W. A. Weir in regard to the recent increase in the age limit of factory employees. The special committee of the Branch is also working with the Montreal Board of Trade and La Chambre de Commerce to obtain improvement in Montreal cartage facilities.

The Montreal Secretary has been devoting as much time as possible to the insurance canvass in Montreal and the Province of Quebec generally.

TRADES UNION LAW.

The Judicial committee of the privy council has declined to permit an appeal *in forma pauperis* from the decision of the Ontario court of appeal in the case of the Metallic Roofing Company against members of the Amalgamated Sheet Metal Workers' International Association, No. 30. By the original judgment the company was given $7,500 for damages caused to it by the calling out of its work people and by the publication of libelous statements in regard to its methods. While the judgment was against individual members, the property of the international and local unions was made liable for the amount. This judgment was maintained on two appeals, and now the privy council declines to interfere with it under the circumstances in which the application was made. As the case stands, therefore, the property of an incorporated trade union is liable for damages done to an employer by the ordering of a strike. The matter is one of great, and, it would seem, of growing importance. As the situation stands now it is calculated to make trades union managers and members careful in their proceedings.—*Montreal Gazette.*

CANADIAN GOODS IN AUSTRALIA.

Mr. D. H. Ross writes in his report to the Trade and Commerce department as follows:

"The catalogues of Canadian manufacturers filed in this office have been more frequently referred to during the last month than at any other time since their receipt. Melbourne importers of a large variety of American goods are now turning their attention to Canada, more particularly on account of the exceedingly slow deliveries of orders placed in the United States. Manufacturers in the Dominion should promptly endeavor to make more determined efforts to avail themselves of the exceptional opportunity now presenting itself in increasing their exports of goods already well known, and introducing new lines to Australian buyers. If the same care and energy were devoted to the export business as is given to the home trade, the expansion in the values of Canadian exports to Australia would soon reach surprising figures. Capable representation in Australia is the principal factor in successfully introducing new lines and exploiting this important market.

Canadian Catalogues and Discount Sheets.

"The importance of having the catalogues of Canadian manufacturers filed in the various commercial agencies is demonstrated from week to week by trade inquiries at this office. The catalogues, however, are of no immediate service unless accompanied by the latest discount sheets, preferably upon a f.o.b. New York basis, or (on heavy lines) upon a c.i.f. Australian basis. To obviate prolonged delay, which frequently means the loss of a season's business, manufacturers are earnestly requested to send their latest export prices to this commercial agency. New catalogues with similar information will also be very acceptable."

Canadian News Paper in Australia.

"The consumption of news paper in Australia is increasing from year to year, and it is satisfactory to report that the demand for Canadian paper is becoming extensive throughout these States. It is estimated that approximately the Commonwealth will this year import 60,000 tons of news paper, of which 50,000 tons are required on reels and about 10,000 tons in flat. Paper mills in the Dominion are devoting more attention than heretofore to this trade, and it is not improbable that at least one-third of the 1907 Australian imports of 'news' will be obtained from Canadian sources of supply."

AN INDUSTRIAL DEPARTURE.

August first was a notable day in the history of Nova Scotia, being the inauguration of the power plant at the Chignecto mines, from which the electrical power is generated to operate the industries of Amherst. This is the only plant in America where electrical power is generated at the top of the mine for distribution. The power is supplied and transmitted six and a quarter miles to Amherst. The fuel used is the waste screenings, which makes the cost of power so low that its use will be practicable for all manufacturing purposes. A large number of prominent Canadians attended the formal opening, and Lieut.-Governor Fraser turned the switch setting the machinery in operation. A telegram was read from Thomas A. Edison, the wizard of electricity, whose father was born in Nova Scotia over a hundred years ago, congratulating the company on its unique enterprise.

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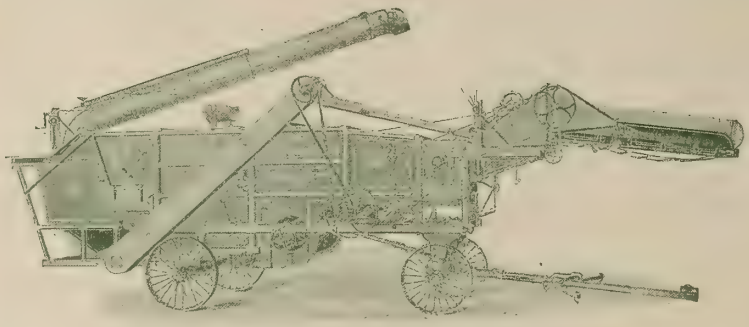
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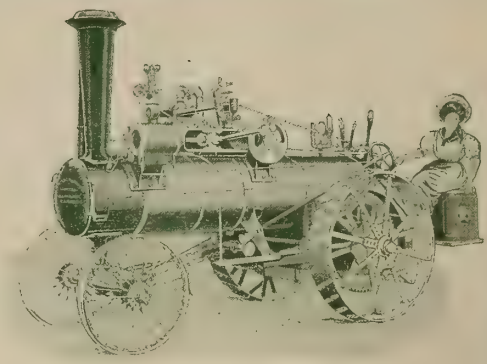


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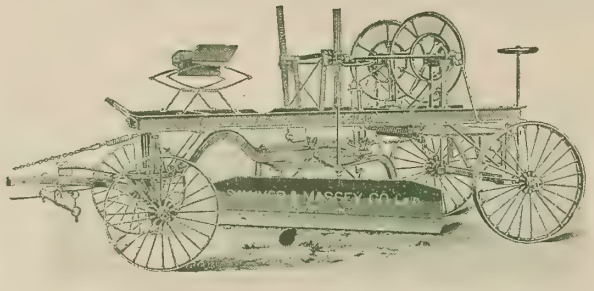




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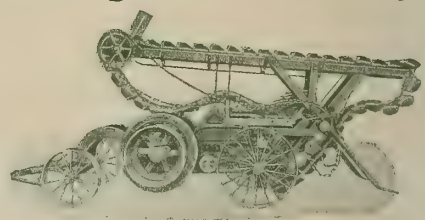
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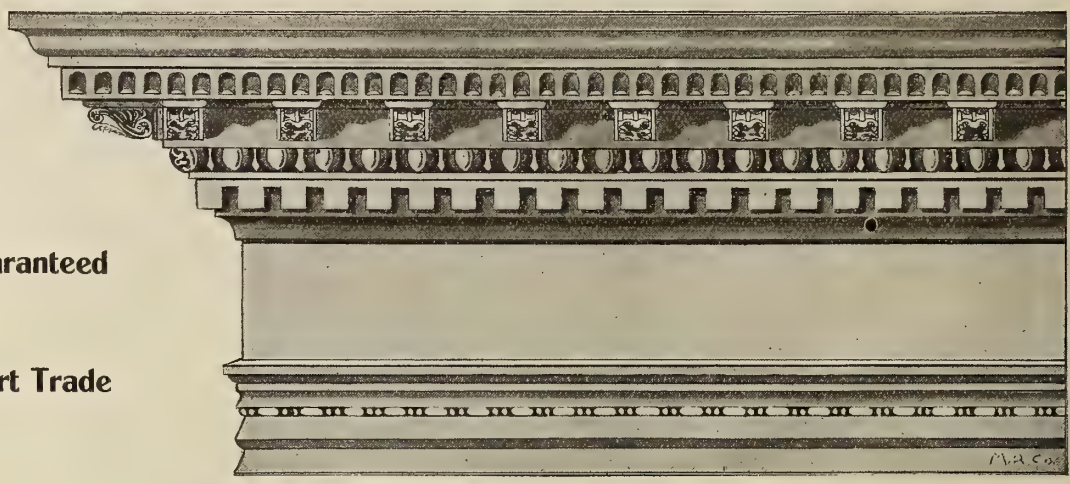
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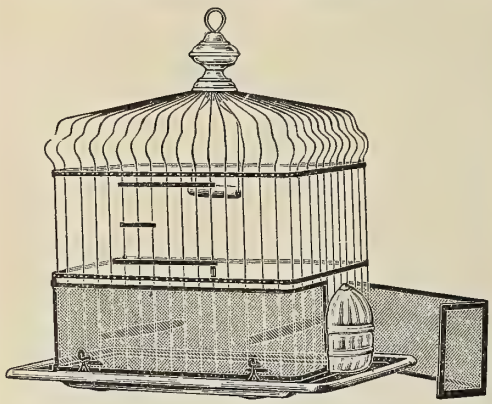
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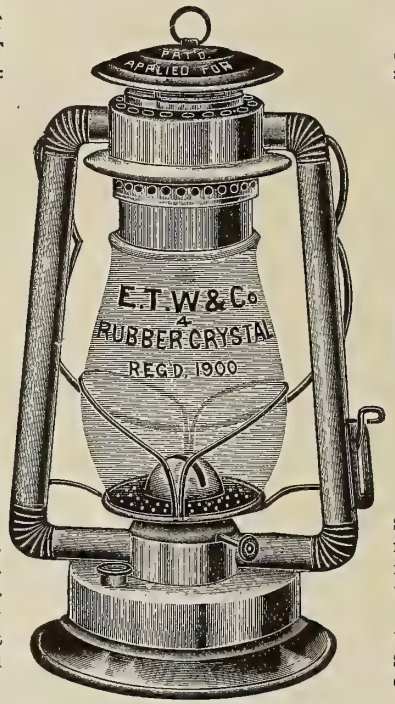
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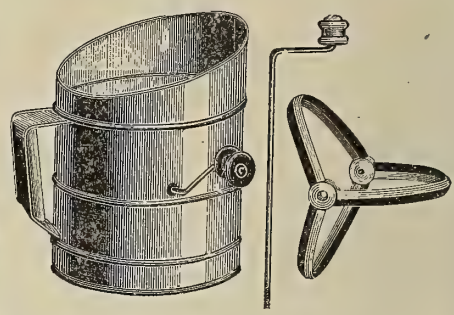


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Oneida Galvanized Chain

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High Grade Bar Iron

COMMON IRON ROLLED FROM BEST SELECTED SCRAP.

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OF EVERY DESCRIPTION IN ROUGH OR ROUGH TURNED.

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IN ANY DESIRED CARBON.

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INQUIRIES SOLICITED - PROMPT DELIVERIES - ESTIMATES FURNISHED

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Castings of All Kinds

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The Hart Twin Polishing and Buffing Machine

2 MACHINES IN 1 **INDIVIDUAL ENDS**

Minutes are Cents



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Either man can change his wheel without stopping or interfering with the man on the other end. Thus, saving at least one hour per day or about $90.00 per year. The saving of time and material thus effected will warrant any manufacturer in putting his old style polishers in the cupola and installing our up-to-date machines.

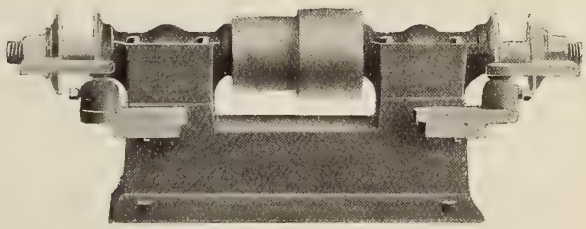
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Length of crucible steel arbor, 66 in.
Distance between wheels, 56 in.
Diameter of arbor between collars, $1\frac{1}{4}$ in.
Size of bearings, $1\frac{1}{2}$ x 15 in.
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Height from floor to centre of arbor, 39 in.
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We make 19 sizes of Cyclone Grinders

Everything in Grinders and Abrasive Wheels

Cyclone Grinder No. 16



WILL CARRY TWO WHEELS 12 x 2 IN.

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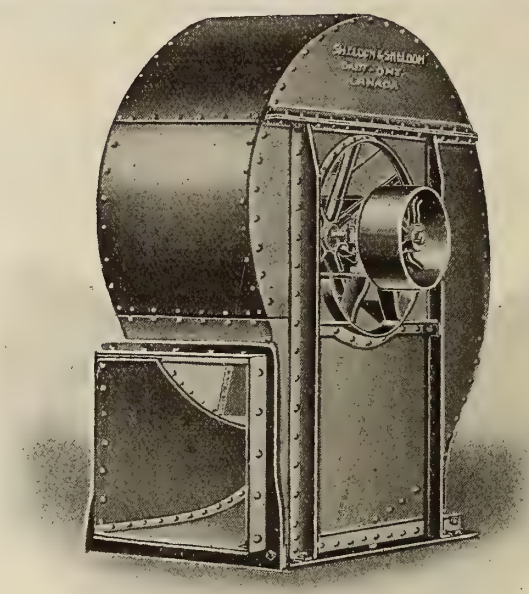
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Heating
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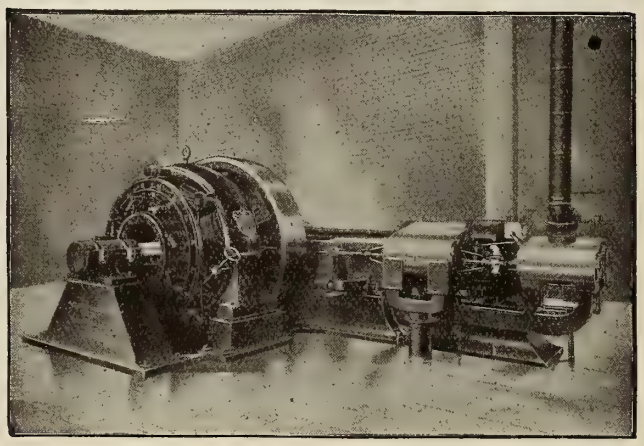
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Specially adapted for Direct Connection. Perfection in High Speed Engine Design. Send for Bulletin No. 6.

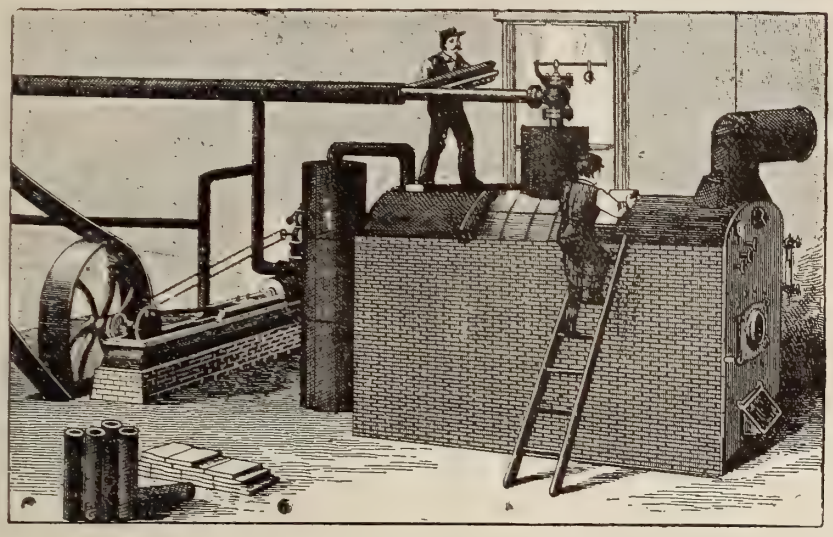
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If NOT You are BURNING MONEY



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Pays for itself in one season, and is a revenue producer indefinitely.

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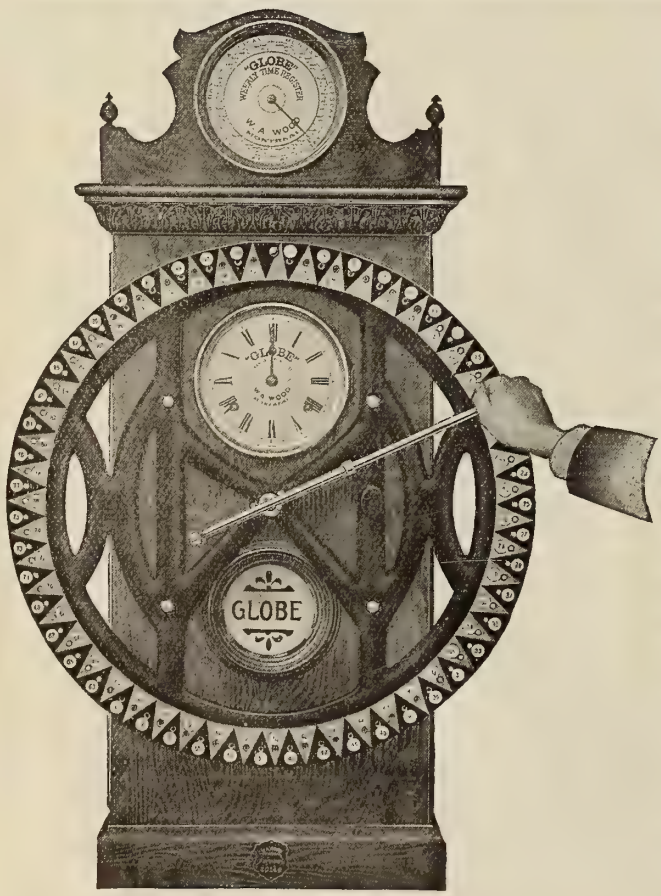
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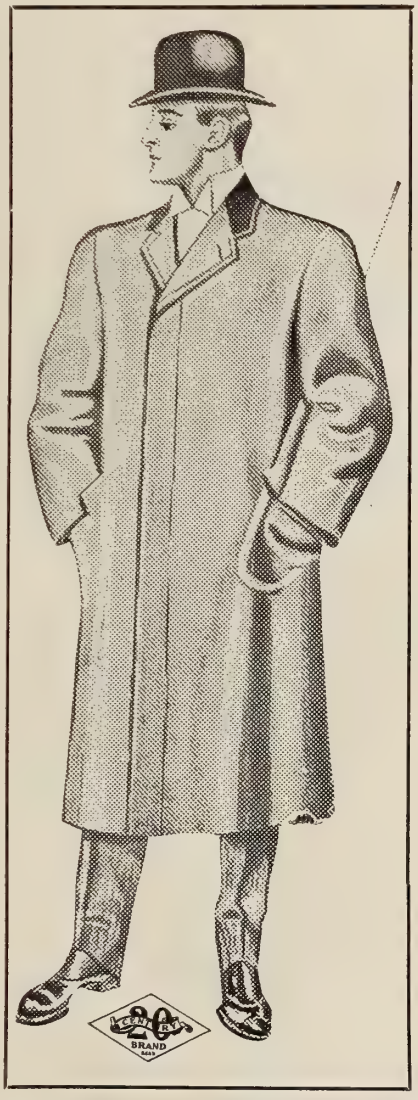
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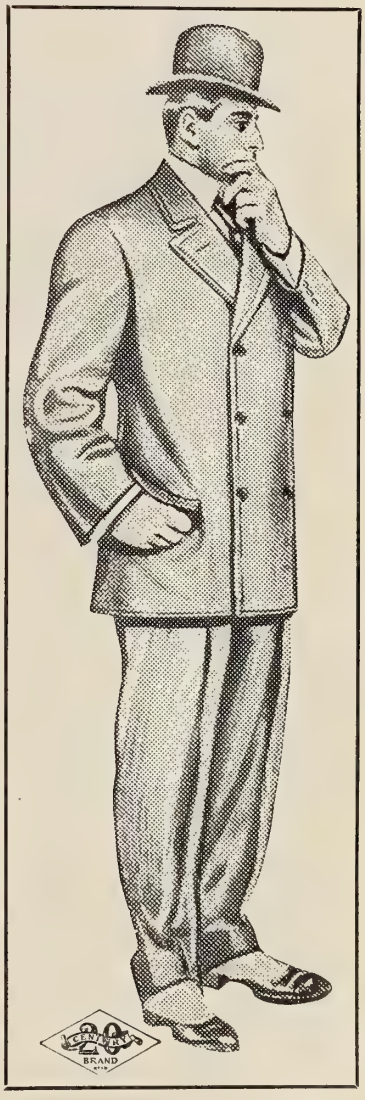
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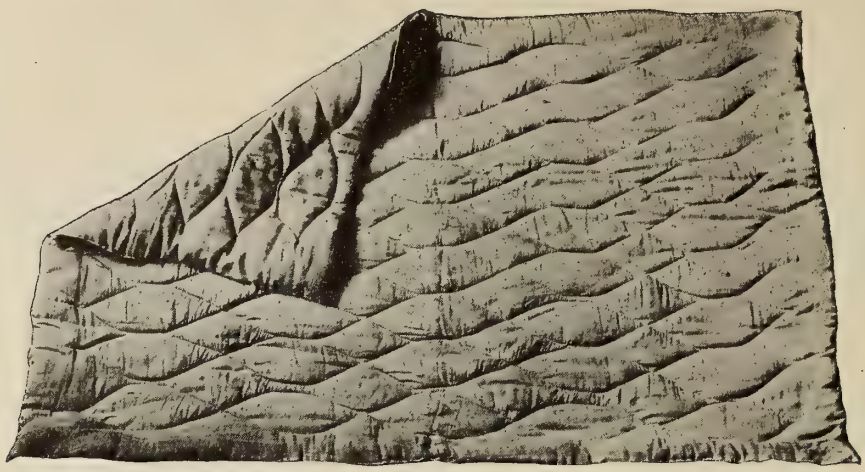
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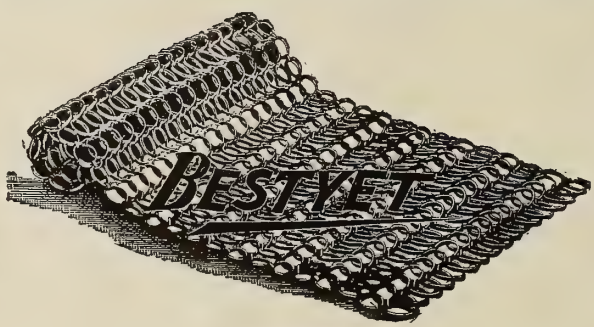
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BESTYET WIRE MATS

As its name implies, this is the BESTYET Wire Mat on the Market

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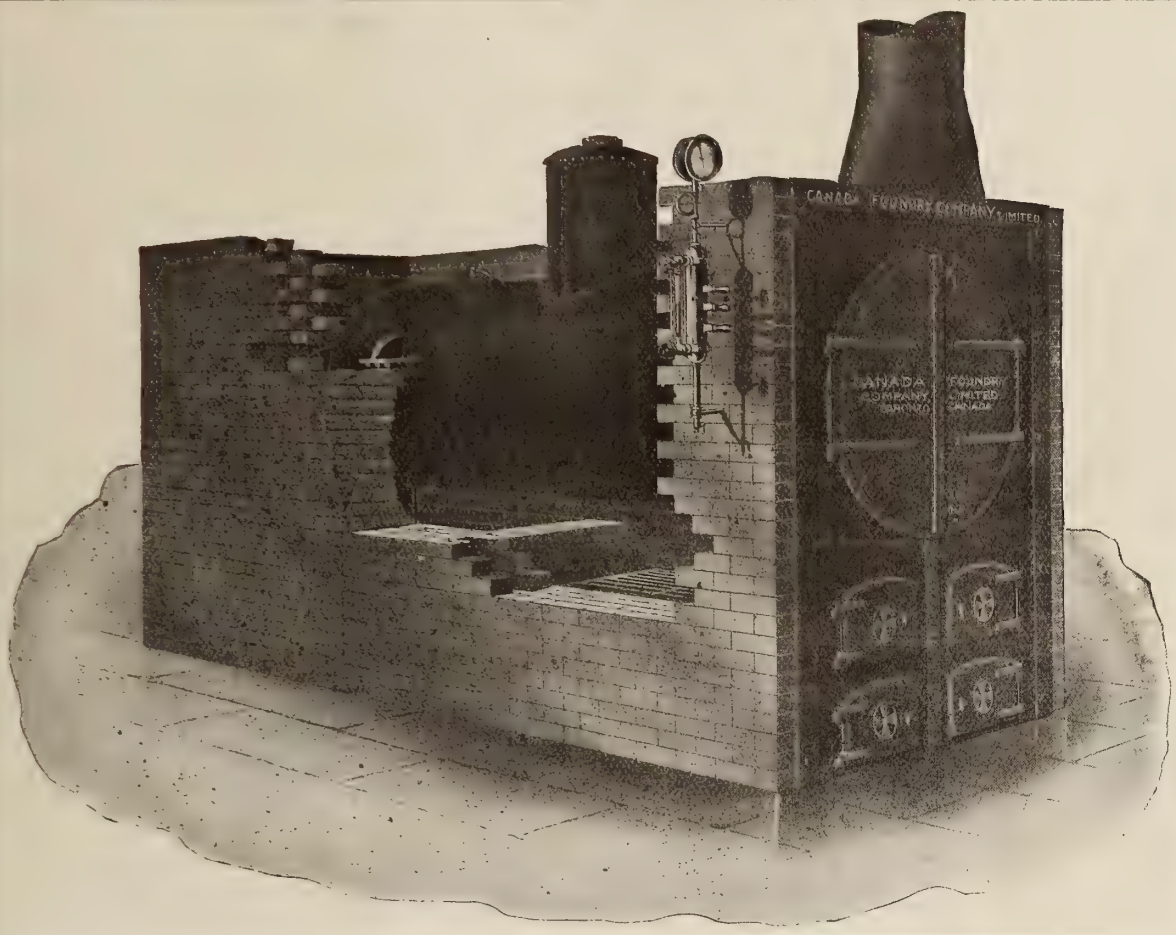
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FOR 100 POUNDS WORKING PRESSURE

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Five 60 inches x 16 feet, 90 H.P.
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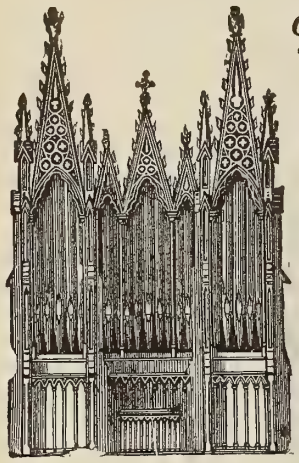
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Fredericton, N.B.—Cathedral (Anglican).
St. John, N.B.—Centenary (M. E. Church).
Yarmouth, N.S.—Trinity Church.
Lunenburg, N.S.—Lutheran Church.
Amherst, N.S.—Baptist Church.
Halifax, N.S.—St. John's Presbyterian Church.
Sydney, C.B.—M. E. Church.
New York City—St. Francis Xavier's Church.
Toronto, Ont.—St. Andrew's Church (the largest in Canada).
" " Walmer Road Baptist Church.
Hamilton, Ont.—Centenary Church.
Brantford, Ont.—Brant Ave. M. E. Church.
Stratford, Ont.—St. James' Episcopal.
London, Ont.—1st M. E. Church.
Winnipeg, Man.—Broadway M. E. Church.
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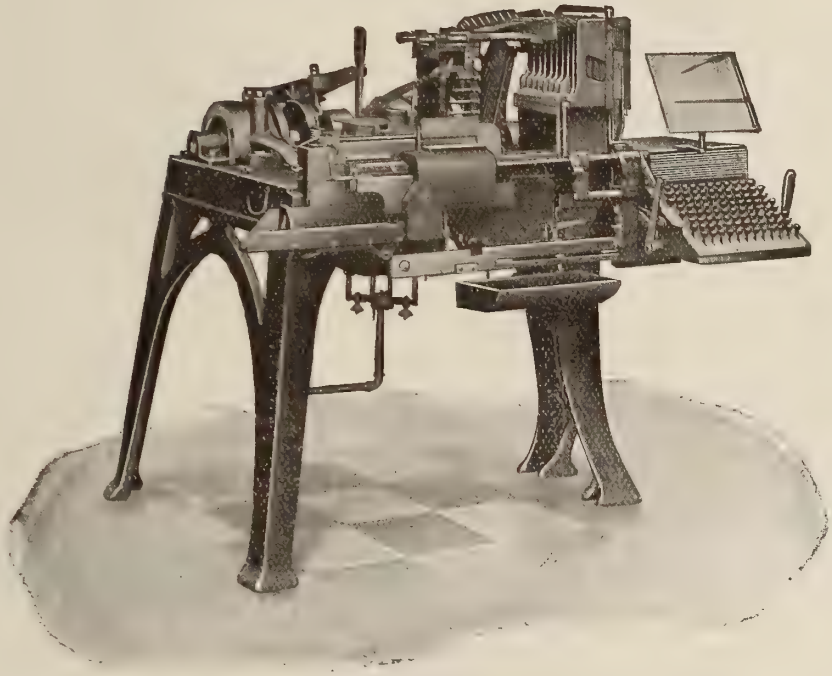
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$1,250

A speedy, cheap machine, adapted especially for the small newspaper and job office, but used by a number of large offices.

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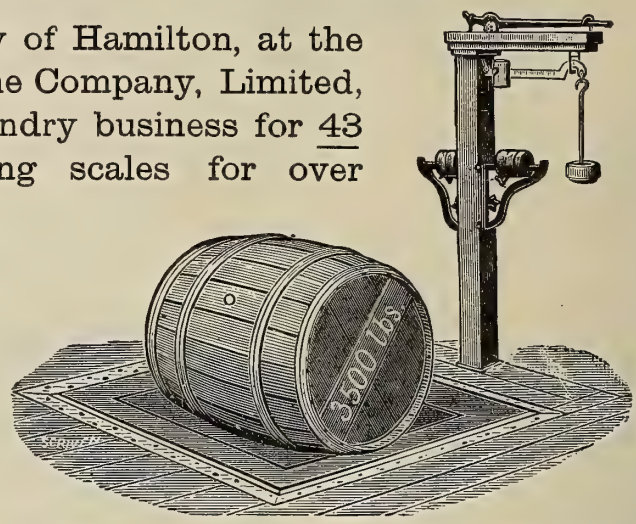
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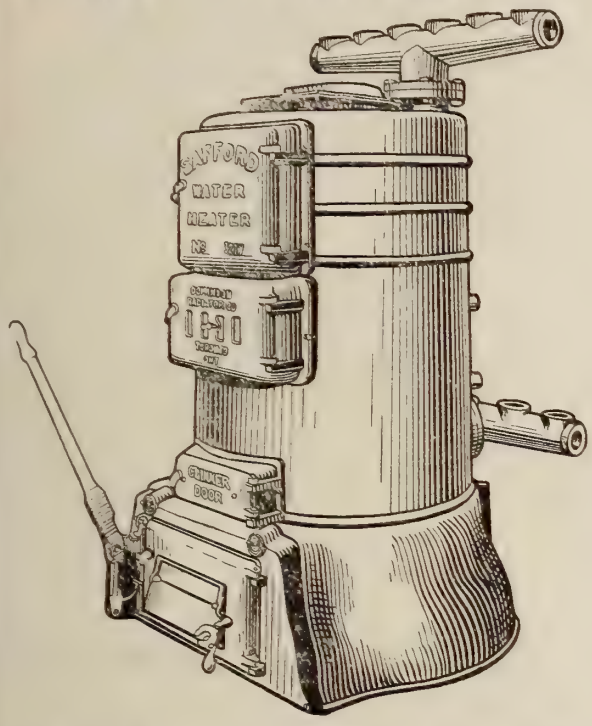
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The "Safford" Hot Water Boiler



Has developed a higher efficiency and greater heating capacity, relative to its fuel consumption, than any other Boiler on the market. It meets every requirement of up-to-date Hot Water Heating, and can be relied upon to perpetuate that enviable reputation which the "Safford" Radiator now enjoys.

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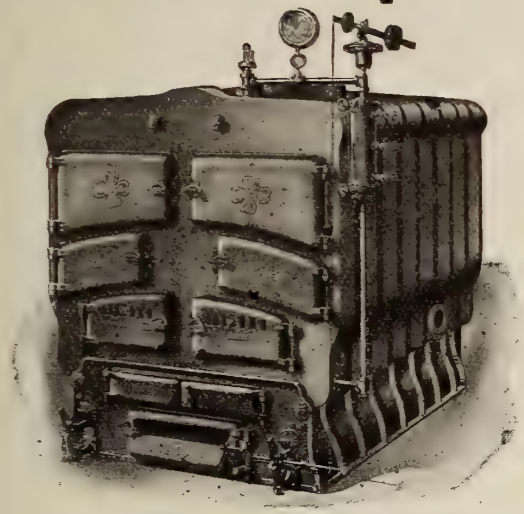
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It illustrates economy of fuel in the highest degree.

Only scant attention needed to the firing.

No ash-sifting grate required, as fuel is burnt to an ash, the results of free combustion.

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Is the climax of scientific skill in Steam Heating appliance, having the largest fire-to-water surface possible.
It maintains heat for 8 hours in coldest weather.
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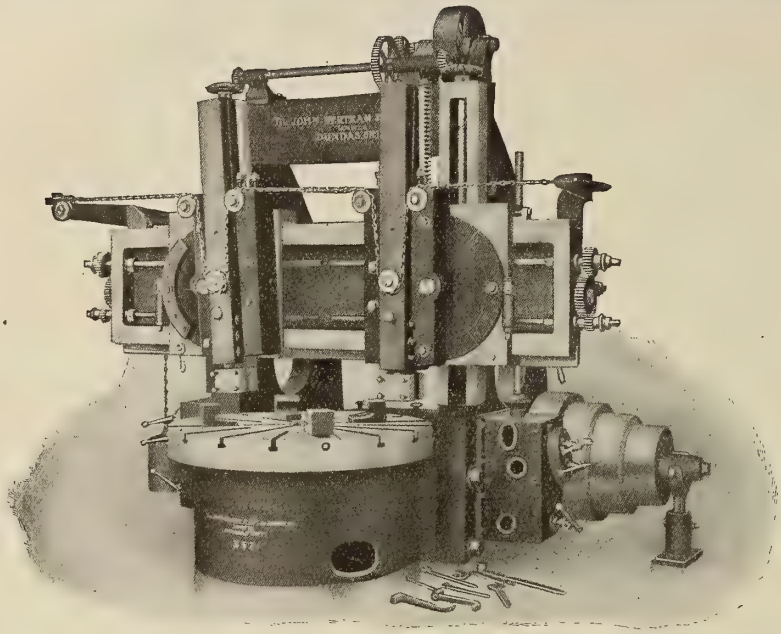
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SPECIALLY designed for rough turning and finishing steel tires and other work requiring the greatest power and rigidity.

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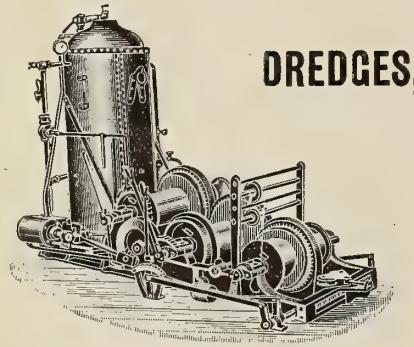
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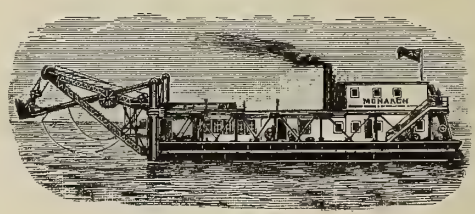
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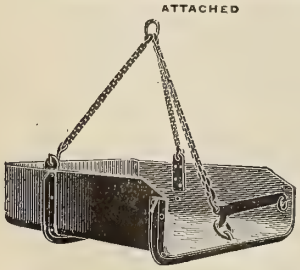


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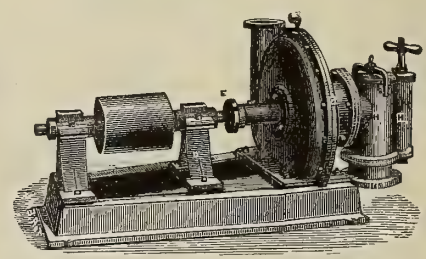
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Centrifugal Pumps for Water and Sand



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"Canadian Club" Whisky

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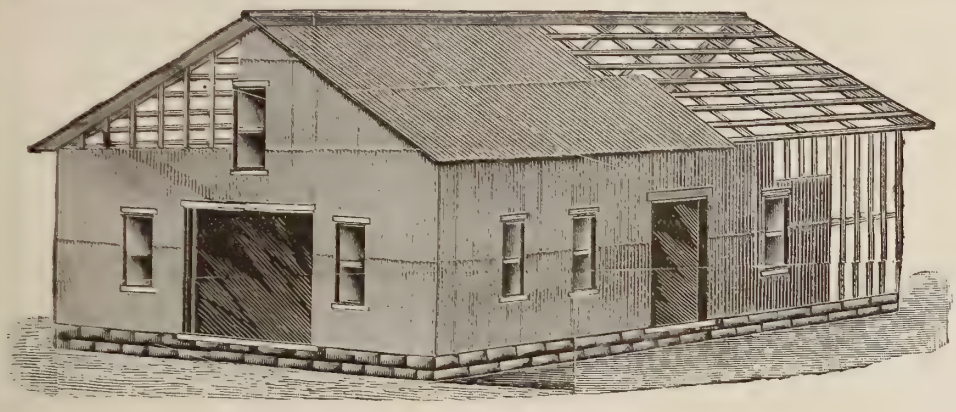
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the cheapest permanent construction for factories and warehouses. We know that it will surprise you to see at how small an outlay you can extend your plant. Will you give us the opportunity of explaining our time-tried method? A postal to our address will bring the information.

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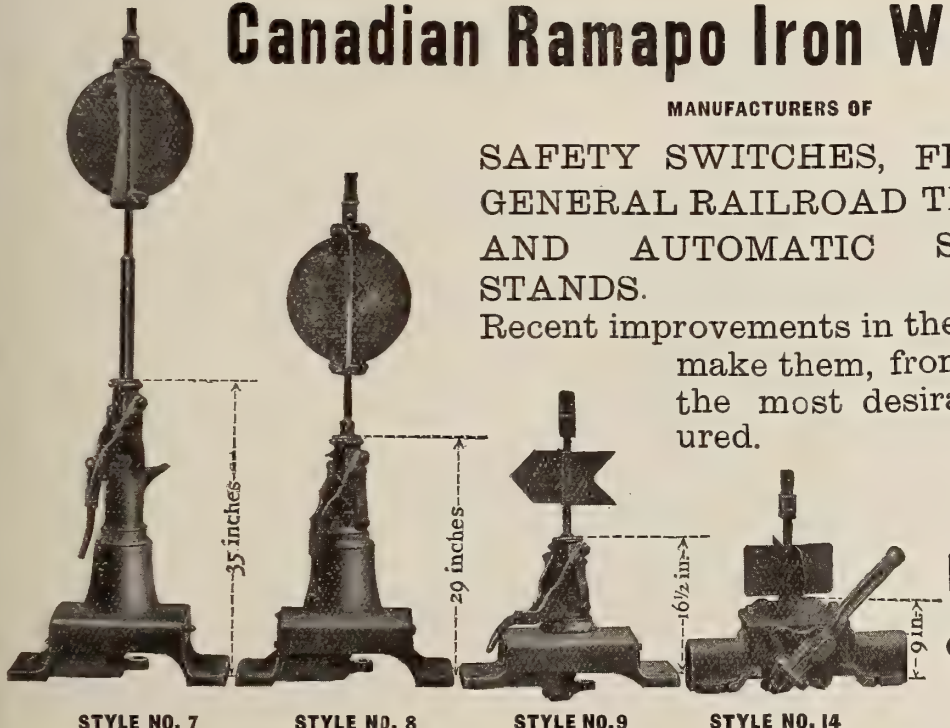
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Recent improvements in the RAMAPO STANDS make them, from every point of view, the most desirable stand manufactured.



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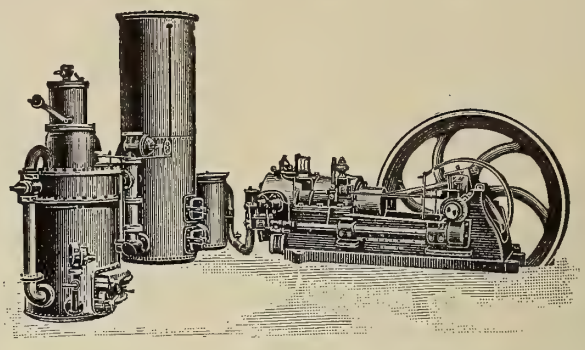
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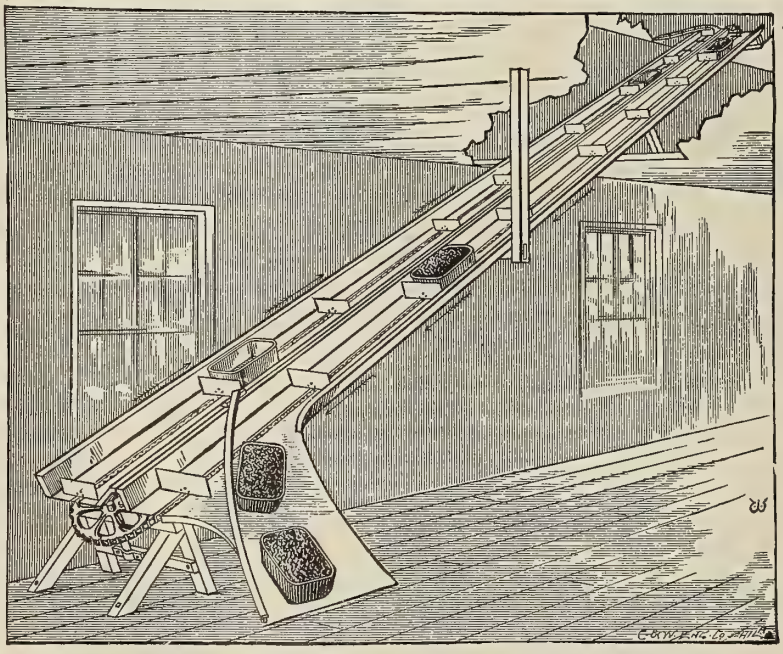
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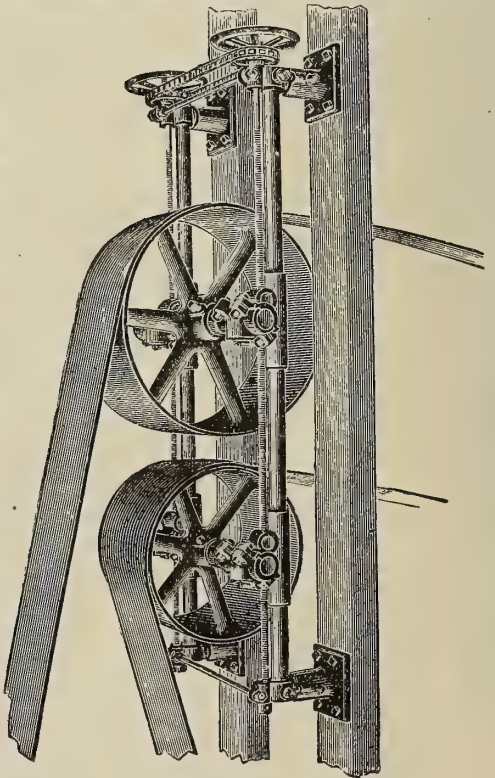
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INDUSTRIAL CANADA

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THE FUTURE OF THE RAILWAY COMMISSION.

NO greater tribute could be paid to the Board of Railway Commissioners of Canada than the transference of such troublesome questions as the regulation of Express and Telephone Companies to their charge. Because they have been faithful in a few things the Government has placed them over many. Their work throughout has been difficult and onerous. They had to establish their own procedure; adjudicate in cases on which there were no previous decisions; and in a word settle the respective positions of the railways and the public. This was all the more arduous from the fact that during the last few years privileges which have been heretofore assumed as rights by the railways have come to be seriously questioned by shippers and even the foundation stone of railway traffic managers' theory and practice, the right to charge all the traffic will bear, in a cumulative rather than a reciprocal sense, has been shaken by sacrilegious hands.

The very power which resides in the Commission has made its labor all the more exacting. The questions which it has been deciding during the past three years are settled finally, or until the Railway Act is amended. There is no appeal from their decisions on points of fact; only on their interpretation of the law and with their own consent can an appeal be taken to the Supreme Court. Hence the decision on a submitted case must be made not only with a knowledge of all the conditions surrounding it, but also with consideration for all similar questions which might be affected by that case. Investigations have had to be thorough, with ample opportunity for all interested parties to prepare a statement of their case and to submit evidence.

The work of the Board has been good. The tendency to refer to it every knotty question bearing on a public utility, however, and the multitude and variety of the problems on transportation which have been and are being submitted to it for decision, make some kind of a change necessary. There is too much work for the Board to accomplish expeditiously in its present form. A suggestion has come from the Chairman, Judge Killam, which will meet with much favor, representing as it does the opinion of the man who, more than any other, sees the amount of work to be done and the necessity of doing it promptly. His idea is to divide up the members and apportion the work among them, so that one will pursue independent inquiries along one line and another along another. Railway work would naturally fall into two divisions, traffic and equipment. These might in turn be subdivided. If telegraph, telephone and express companies are to remain under the jurisdiction of the Board, which, of course, they will, additions to the Board will have to be made. The Interstate Commerce Commission of the United States consists of seven members. It has, besides, a much larger staff of legal, secretarial and clerical assistance than the Canadian Board has.

It is sincerely to be hoped that the Chairman and his associates will succeed in working out a scheme of re-organization which will retain the excellent qualities of the present system, with an added capacity for the speedy transaction of business. The present Board, from their past experience, have a thorough grasp of the requirements of the commercial interests of the country. They would be strengthened by the addition to their ranks of men skilled in traffic affairs, the construction of rates and engineering. That any increase in the number of commissioners will be for the purpose of taking in such men is sincerely to be hoped. This, we feel sure, is the idea of the present Board.

A PULP WOOD POLICY.

A PULP WOOD policy has been adopted by the Government of Ontario, which will stimulate the paper making industry of the Province and add materially to its productive wealth. Tenders will be called for shortly for two extensive pulp wood concessions. A condition of sale will be that the purchaser shall manufacture the wood into paper in

the Province. The Government cannot be too highly commended for its decision, and it is only to be regretted that the action, being Provincial, can apply merely to future concessions. It rests with the Federal Government to put on an export duty and thus force the manufacture of all pulp wood into paper in Canada. By the present decision those who have concessions previously granted will not be disturbed in their holdings. The only way they can be affected is by a Federal export measure. Previous pulp wood concessions were granted on condition that the wood be manufactured into pulp in Ontario. The present policy goes a step farther and makes the manufacture of the pulp into paper an additional requirement.

The illuminating address of Prof. Fernow, at the recent Convention of the Canadian Manufacturers' Association, is deserving of careful thought in this connection. Canada's forests are not illimitable. We are accustomed to talk of this subject in superlatives. Undoubtedly our supply of timber is vast. But while it is decreasing each year, the demand for it is advancing with giant strides. We must protect and conserve what we have left.

The pinch is being felt in the United States. A recent meeting of newspaper men was held to discuss what they considered a critical condition in the paper supply. There is no let up in the demand. Every day in the week and every week in the year the presses all over the continent consume their tons upon tons of paper. The Sunday edition alone of a New York paper is estimated to use the pulp wood of twenty-eight acres of forest. The paper must be had and it must be had at the cheapest possible figure.

Here is a great national industry within our reach. Are we going to grasp it? When we consider the sacrifices that the United States made to establish their tin-plate industry and that England made to establish her woollen industry, and when we consider what wealth and prosperity they have in time brought to these countries, we cannot but view with mingled satisfaction and disappointment our own possibilities in the pulp and paper industry;—satisfaction at the excellence of our opportunity when compared with that of the other nations in the cases cited, and disappointment at our failure to seize that opportunity and coin it into national wealth.

It will be remembered that when the Ontario Government placed a ban on the export of unsawn timber, saw mills at the mouth of every river in Michigan were taken to pieces and set up in the timber lands of Ontario. The result was instantaneous. The capital invested in this country was greatly increased, many more men were employed and the forest products were greatly increased in value by manufacture.

Might we not expect similar results to follow the placing of an export duty on pulp wood? By it the products of our country will grow in value by millions of dollars, the number of our skilled workmen will be increased, and new towns will hum with industry.

A NATIONAL PROBLEM.

IT derogates nothing from the excellence of the oratory and enthusiasm of Mr. J. A. Emery to say that the strong effect of his recent speech before the Canadian Manufacturers' Association was to a large extent the result of the widespread interest which is now being taken in the subject of technical education. His audience on that occasion consisted of manufacturers from one end of Canada to the other. It was thoroughly representative of the manufacturing interests of the country. By such an audience and on such an occasion the supreme need of industrial education in the race, not for commercial supremacy, but for commercial existence, as expressed in the compelling words of Mr. Emery, was listened to with breathless attention and frequent expressions of approval.

Not employers of labor alone, but workmen, too, are fully alive to the advantages of technical education. Unfortunately of recent years in the stress of life many causes of friction have arisen between capital and labor. It is an augury of a better relationship in the future, that these two great elements in the industrial life of the country should have recognized a common means for the betterment of both.

Few movements have met with such wide acceptance as the one which is now under way, urging upon the Federal Government the necessity of appointing a commission to inquire into the whole subject of technical education and to outline a comprehensive scheme for common action throughout Canada. We see what wonderful progress Germany has made during the past thirty years in an industrial way. From a group of practically unknown states she has risen to a position of eminence among the manufacturing nations of the world. She has been able to do this because by advanced methods of organization and technical training, she has made her working unit the most effective in the world. Efficiency has been the master word by which she has conjured success from the midst of difficulties.

As with the individual, so with the nation, competition makes success each year more difficult to attain. Methods which were perfectly satisfactory a generation ago are antiquated to-day. Recognizing the position of superiority, which a well-trained and well-equipped body of workmen makes possible, the other nations are following Germany's lead and are establishing technical schools. When England and the United States take the matter up in a large and adequate manner, it will be an evil day for the manufacturing country which is not similarly equipped. Canada has just entered upon her period of expansion. She must not be fettered by an inability on the part of her workmen to produce as actively and as well as the workmen of other countries. In national aptitude the Canadian flatters himself that the men of no nation excel him. It rests with the state to say whether that aptitude shall be developed into a working force of the maximum effectiveness.

THE AUSTRALIAN TARIFF.

AN examination of the new Australian tariff, full details of which are now at hand, fully substantiates the reports current some weeks ago regarding its strongly protective tone. With her isolated situation Australia may well be said to enjoy a certain amount of natural protection, for the foreigner must necessarily pay high freight tolls before gaining access to her markets. In framing her new tariff the Australian Government appear to have disregarded this fact, for the schedule they have adopted would of itself afford strong encouragement to native industries. When combined with the protection of over sea freight rates, however, it virtually prohibits the importation of many lines of manufactured goods, and as a result we may expect to see an immediate and widespread development of Australian manufacturing enterprises.

The new tariff is so entirely different from the old in its groupings that it is difficult to make comparisons, but the following statement of duties in effect on certain lines in which Canadians are interested will be sufficient to indicate how sincere Australia is in her desire to manufacture out of her own materials and with her own labor everything she is capable of producing economically:

Table waters, aerated or mineral, 25 per cent.

Butter and cheese, 3d per lb.

Canned fish, 1½d per lb.

Wheat flour, 2s. 6d. per cwt.

Garments, wholly or partly of wool or silk, 45 per cent.; preferential, 40 per cent.

Other apparel of any material, including cravats, garters, belts, etc., 40 per cent.; preferential, 35 per cent.

Blankets, flannels, buggy rugs, etc., 30 per cent.

Carpets, 20 per cent.

Curtains and blinds, 25 per cent., preferential, 20 per cent.

Furs, partly or wholly made up, 35 per cent.

Denims, 35 per cent.; preferential, 30 per cent.

Woollen piece goods, 35 per cent.

Socks and stockings, woollen, 30 per cent.; preferential, 25 per cent.; cotton, 25 per cent.; preferential, 15 per cent.

Lawn mowers, spraying machines, garden hose reels, road scrapers, stump extractors, 20 per cent.

Lumber, undressed, 1s. 6d. to 2s. 6d. per 100 feet.

Lumber, dressed, 3s. per 100 feet.

Ploughs, cultivators (not disc), corn shellers and huskers, 20 per cent.

Disc ploughs and cultivators, drills, winnowers, 25 per cent.

Churns, refrigerators, incubators, 25 per cent.

Stripper harvesters, £16 each.

Strippers, £8 each.

Cream separators, hay teders, horse rakes, maize harvesters and binders, threshing machines, 10 per cent.; preferential, free.

Barbed wire, 30 per cent.; preferential, 20 per cent.

Wire netting, 30 per cent.; preferential, 25 per cent.

Proprietary medicines, 15 per cent.

Perfumery, 35 per cent.; preferential, 25 per cent.

Furniture n. e. i. (except of metal, wicker, bamboo and cane), 40 per cent.; preferential, 30 per cent.

Chairs, 7s. 5d. each, or 30 per cent., which ever returns the higher duty.

Sash and door, 40 per cent.; preferential, 30 per cent.

Boots and shoes, any material, 35 per cent.; preferential, 30 per cent.

Rubber hose, belting, tires, 25 per cent.; preferential, 20 per cent.

Leather belting, 25 per cent.; preferential, 20 per cent.

Advertising matter, including catalogues, etc., 6d. per lb.

Newspapers, 10 per cent.; preferential, free.

Bicycles, £5, 5s. or 30 per cent., which ever rate returns the higher duty.

Parts of bicycles, 15 to 25 per cent.; preferential, 10 to 15 per cent.

Automobiles and parts of, 35 per cent.; preferential, 25 per cent.

Perambulators and go-carts, 35 per cent.; preferential, 30 per cent.

Pianos, upright, £5, 10s. or 40 per cent.; preferential, £5 or 30 per cent., which ever rate returns the higher duty.

Provision is made for liberal increases in some of the above duties by public proclamation as soon as it is apparent that the manufacture of the goods in question has been sufficiently established in the Commonwealth, while other articles, now free, including the more elementary iron and steel products, as well as mowers and reapers, will become dutiable under similar circumstances.

The effect of the new tariff on individual lines of trade is referred to in a recent issue of the Globe. According to Mr. Thos. Findley, of the Massey-Harris Co., it will entail considerable loss to that concern on shipments at present en route to Australia. About one-third of the implement trade between the two countries has been made up of stripper harvesters alone. This is a machine peculiar to Australia, California, South America, and all the dry countries, for the grain is stripped, threshed, fanned and bagged all by the one machine operating in the field. Up to 1905 the duty on these machines was 12½ per cent., or in round figures, £5. In the fall of that year the duty was increased to £12 specific, with the frank avowal that it was intended to be prohibitive to protect Australian manufacturers. The new duty of £16 specific makes it practically impossible to do any further business in this article.

Mr. T. A. Russell, of the Canada Cycle & Motor Co., according to the same authority, states that their Company had a large consignment of bicycles on the way to Australia when the tariff was announced. The new duties are so prohibitive that all these bicycles will have to be returned, for to realize on them they would have to sell them at prices which the Australian market would not stand for. However, the Australian bicycle business is not lost to Canadians, for it is still possible to send all the parts of a wheel and have the assembling done by Australian workmen. It is just this protection to labor that is aimed at in the new tariff.

A still more glaring instance is furnished in the case of a consignment of chairs shipped by the North American Bent Chair Co., of Owen Sound. The chairs were ordered many months before the new tariff was introduced, but unfortunately were shipped just prior to its announcement. Under the old tariff the duty on the entire consignment of one hundred and twenty cases would have amounted to only £77, which the importer was quite prepared to pay. When the chairs reached Perth, on August 30th, the importer was informed on attempting to pass an entry through the Customs House that he would be required to pay in duty £1,093, a sum several times as large as the chairs were worth.

This office will be pleased to furnish details of the new tariff to any parties sufficiently interested to enquire.

AN UNFORTUNATE CITATON.

THE Toronto Globe cites the prosperity of the British tin-plate manufacturers as proof that trade laughs at tariffs. The prosperity of the British tin-plate manufacturers in no way affects the advisability of the United States or any other nation protecting its tin-plate industry. The object of a protective tariff is to develop a home industry, not to injure that industry in some other country.

Such being the case, let us consider the status of the tin-plate industry. Before the passage of the McKinley Tariff the United States bought practically its entire supply of tin-plate from Wales. The trade was very large and was increasing from year to year as the consumption of canned goods increased. Tin-plate was being made in England under exceptionally favorable conditions as to labor.

Under the aegis of the new tariff factories sprang up in the United States for the manufacture of tin-plate. For a time, until the plants got working to the best advantage, the cost of the product was high. But it soon declined. Home competition set in and before many years the price to the consumer compared favorably with that which was formerly paid for the imported plate.

But in the meantime a big industry had arisen. Hundreds of thousands of dollars were invested in buildings and machinery. This gave employment to people in many lines of trade. Thousands of men were directly employed in the manufacture of the plate. These had to be clothed and fed. An additional market was provided for the farmer, and generally speaking the course of trade received an impetus through the establishment of the new industry.

In this particular case there was no attempt to force the

situation. The demand grew from small beginnings till it reached such proportions as to justify the establishment of the industry. When it was established the market was there for the product.

We are told to look to Great Britain to see the effect of free trade on manufactures. We look and we see manufactures carried on with such, from our standpoint, impossible conditions as to labor that we recognize that on this continent we can never manufacture on an equality with her. Were the United States then to sit down in wonder at the achievements of the British manufacturers, and continue to buy their goods from them for all time to come? Or were they to take the only possible means whereby they, too, might become great as manufacturers? The object lesson is a double one. The United States chose the latter course. They protected their industry and now we see that they, too, as well as the British, are prosperous manufacturers of tin-plate.

We could, with advantage, take a careful look at the picture suggested by the Globe. We have a woollen industry which is in much the same condition as the United States tin-plate industry was before the passing of the McKinley tariff. Of the hundred and odd mills which have at various times struggled along in a precarious existence, a hundred have been forced to close. Meanwhile, the consumption of woollens in Canada has been growing enormously. The skilled hands which formerly manned these mills have scattered to various textile centres in the United States. They are lost to Canada. The capital invested in the buildings and machinery lies stagnant. It produces no revenue itself, nor does it enable a body of workmen to earn wages. It is in a double sense lost to the country.

What would be the result of a protective tariff for this industry? Let us revert to the United States and its tin-plate industry. The question is answered. Canada might have its busy mills, throbbing with industry, sending forth their army of well-paid workers, to be clothed and fed in turn by Canadian labor. Canada might have the millions of dollars, which are now sent abroad for imported woollens, kept within her own borders, circulating among her tradesmen and farmers. Canada might have the capital already invested in woollen mills, earning dividends to be invested in turn in the development of the country's resources. This is the true national policy. It is the policy which will perpetuate good times.

THE NEW ZEALAND TRAFFIC.

LATE advices giving the tariff schedules as they will be finally adopted by the New Zealand Government show that Canada will enjoy many advantages from the Preferential rate, although some articles which in the first draft were granted a preference have since been removed from this list. The new tariff will be scanned by many manufacturers with close interest. New Zealand opens up an advantageous market for our goods. The people are large buyers of foreign goods. They possess a fertile soil which, by advanced methods of intensive farming has been made to produce abundantly; their ranching and mining have been most successful. Added to these is the fact that they still buy most of their manufactured goods abroad.

Hitherto Canada has not taken her share of the trade that is offering. New Zealand's imports for the year before last were over sixty-six million dollars. Last year they were considerably above that figure. Of this amount Canada supplied 565,000 dollars' worth. That works out to just about four-fifths of one per cent. That is not enough. We are favorably situated to do the business and the New Zealanders are willing to buy from us. We have a distinct tariff advantage over the United States, who are our nearest rivals. A fair appreciation of the value of the market seems to be the only thing necessary.

That such an appreciation is growing is shown by the large number of Canadian manufacturers who took advantage of the New Zealand International Exhibition to introduce their goods into that country. Over eighty Canadian companies sent extensive exhibits. This in itself is a fair proof of the growing desire to get a foothold in the new field.

A few of the lines in which Canadians are especially interested are given below. The complete schedule is on file in the INDUSTRIAL CANADA office, and information will be gladly supplied on any item not mentioned here.

Agricultural implements of all kinds are admitted free of duty as heretofore.

There are also on the free list:

Paper, printing and other specified qualities. Artificers' tools, including axes, spades, forks, etc. Bicycles and tricycles, fittings for—namely, tires, handle grips, pedal rubbers, and various steel parts when not plated, japanned, painted or varnished.

Dairying and mining machinery.
Metal fittings of various kinds.
Gauges and speed indicators.
Emery grinding machines.
Surgical and other fine instruments and appliances.
Rubber soles for shoes.
Glass bottles and earthen jars of a specified size.
Brass tubing and stamp work in the rough.
Arc lamp carbons.
Insulated cable.
Wheels and tires for locomotives and cars.

On the following articles a duty in addition to that levied under the ordinary tariff will be exacted when the goods are imported from a country other than Great Britain or its colonies:

Portland Cement and other structural and building cement.
Bicycles, tricycles, and the like vehicles, also finished, or partly finished, or machined parts of the same, not otherwise enumerated.
Boots and shoes.
Carriages, carts, vehicles and wheels for same.
Toys, sporting and gaming supplies.
Furniture and cabinetware.
Iron and fibre pipes.
Lamps and lanterns.
Electric batteries and cells.
Galvanized iron manufactures.
Matches.
Saddlery and Harness.
Leather goods, trunks, etc.
Plate glass.
Boilers, land and marine.
Cranes, capstans, etc.
Machinery not otherwise enumerated.
Steam engines and parts thereof.
Boats and launches.
Iron, galvanized corrugated sheets.
Paints and varnish.
Gas Engines.
Gum boots.
Hose, canvas, indiarubber or other.
Fire Engines.

The preference accorded varies for different items in the above list. In the case of Portland Cement it is 50 per cent. From that it runs down to 20 per cent. The articles mentioned are those which are most likely to be exported from Canada. The detailed list may be examined for other items.

A Forest Policy for Canada

How to Perpetuate a Great National Resource

By B. E. FERNOW, Professor of Forestry in the University of Toronto

IT is a great satisfaction to me, that I am permitted to make the first public utterance of my ideas on a forest policy for Canada before a set of men who are accustomed to think of and deal with concrete things. I propose this morning to make you see that forestry should not be in Canada a mere academic subject, an abstraction, but should become as soon as possible a concrete reality.

I dare say that there are few in this audience who are ignorant as to what in a general way forestry means, and why this art should be employed in the management of our woodlands. But as to the methods of its application even the best posted lumbermen may still have something to learn.

I do not propose, however, to discuss technical questions before an audience like this. As manufacturers you are naturally interested mainly in the question of raw material, the outlook of supplies for your manufactures, the question as to their continuousness, as to whether the natural supply is inexhaustible, as has been often claimed, as to whether the necessity has arrived for actively providing for the future, in other words, as to the policy which we should now pursue with regard to our timber supplies. Only when this question has been answered does the question of the technical details come up.

Where Forestry Begins.

The very title which your Secretary has proposed for my subject, "Reforestation," suggests—I beg the gentleman's pardon—a considerable ignorance as to the state of things, and as to the proper policy and proper method in the treatment of your timber resources, if by reforestation is meant artificial replanting. Re-foresting presupposes de-foresting, and the title of the Secretary's choosing implies that a forester's work begins when the country is de-forested. But, truly, forestry begins, or should begin, when the first tree is cut, so as to make the laborious and expensive method of artificial reforesting unnecessary.

When I tell you that on the 12 million acres of German State Forests, which are managed for continuity of wood supplies, the expenditure for planting is less than 18 cents per acre per year, or less than 5 per cent. of the total expense, and that in Prussia of the cost of producing one cubic foot of wood, namely, 2 cents, only ⅓ of a cent goes to planting, you will realize that in a well managed forest property the planting cost is a relatively small item.

There are, to be sure, large areas in Canada where deforestation has progressed to an undesirable, if not dangerous degree, and where it is not only desirable but practicable and profitable to begin the work of artificial reforestation of these denuded areas. The southern sections of Ontario, rich in agricultural lands, are almost entirely cleared of timber-growth. Here a farm area of five million acres can be found containing less than 10 per cent., or 500,000 acres, of woodland, and, I am told, there is altogether probably 50 per cent. of waste land on these farms that could be more profitably employed for wood crops than for farm crops. During the recent strike in the anthracite coal regions of the States, this section actually suffered from a fuel famine, because the farmers' woodlots were too scanty to supply domestic needs. In this section, indeed, reforesting by private land-owners has been begun, stimulated by wise government aid with plant material and advice.

You should, however, understand that such planting of farmers' woodlots has no more meaning for the general lumber supply than the apples in your back garden have on the fruit supply of the country. It can, for practical and technical reasons, accomplish only three things, namely, to furnish local domestic supplies, to improve conditions of the farm, and to make waste lands useful producers. The policy begun a year or so ago by the Ontario Government of encouraging and assisting farmers by plant material and advice in re-establishing woodlots, is a wise one, and only needs to be expanded annually in order to hasten the day when its profitableness to the individuals and to the Province in general will be demonstrated beyond peradventure.



PROF. B. E. FERNOW

Value of Timber Areas.

But the much larger portion of Ontario, and of all the other Provinces in the East, is still in the woods, and the much more important question is as to the condition, present use, and future value and use of this portion.

At the very outset of an inquiry into the conditions of this property, we find a woeful dearth of collected information, an ignorance which leaves the answer open to challenge, because it is based on doubtful facts. Canada has the reputation of having been and still being a great forest country, and one of the most prominent wood exporters of the world. It is claimed by some that 800 million acres, or over 37 per cent., of the land area is under wood.

But if we look at this vast forest area from the manufacturer's point of view, from the standpoint of supplies for the arts and industries,—of its commercial value, and study merely the geography and nature of the country in the light of the reports on the more or less explored outlying parts of the same, we will come to the conclusion that 300 million acres and perhaps less will cover fully the commercially

*Address delivered at the Toronto Convention Canadian Manufacturers' Association.

valuable timberland area, actual and potential, or not much more than one-half of the commercial forest area of the United States. Relatively then, Canada is a poorly wooded country.

This may sound curious to those of you who are located in the vast forest region of Quebec, or Ontario, or New Brunswick, or British Columbia, but these are the smaller portions of your great country and the vast prairie and plains area which is not at all, or only scantily wooded, and is now beginning to be developed rapidly, must also be taken into consideration. Moreover, at least one-fifth of this area is on the Pacific side of the continent.

Possibilities of Our Woodlands.

Area, however, does not mean much except possibilities. Contents in the virgin woods are extremely variable and the more difficult yet more important question is how much available log material this commercial timber area can furnish. Large statistical figures appear to the layman a convincing argument of plenty, but the only way of understanding their meaning is to place them in relation with other figures. At the great forestry convention last year at Ottawa, the vastness of Canada's forest resources was attempted to be displayed by a placard stating, probably based on the best attainable authority, that 532 billion feet of lumber was still available for cutting, and this was stated as if it were a large supply. This apparently enormous figure, however, would not suffice to supply the present annual consumption of the United States for more than a dozen years, nor that of Great Britain, which is more frugal in wood consumption, for the time it takes to grow a good sized log, say 60 years.

All these statistics are, I repeat, merely random guesses, and nobody really knows with any reasonable degree of accuracy the conditions. But I suppose the Statistician of the Dominion had good basis for stating as long as 12 years ago that, "the first quality pine has nearly disappeared," and that "we are within reasonable distance of the time when, with the exception of spruce as to wood and of British Columbia as to Provinces, Canada shall cease to be a wood exporting country." If the estimates of that authority were anywhere near correct the amount of white pine remaining would now be less than 20 billion feet, not enough to supply the present demand for say another decade, and that relatively small balance is mostly confined to Ontario.

Elementary Facts.

Without going into further statistical guesses, I believe, any one familiar by observation and reading with the forest conditions of Eastern Canada will subscribe to the following general statements of the situation:

The larger portion of the commercial forest area of Eastern Canada is cut over and culled of its best timber.

The major part of the culled area, and especially the pineries, is burnt over; the natural reproduction being mainly of inferior kinds.

The supply of spruce for paper manufacture remains relatively the largest item in the commercial timber supply.

Little or nothing is done to protect or encourage the production of future supplies.

Perhaps a brief glance at the condition of the wood industry may be desirable.

Although Canada is rated as one of the foremost wood exporting countries, it has in later years fallen considerably behind the United States, the latter doubling its wood exports during the last decade, and having in 1904 exceeded the $60,000,000 mark, while Canada has hardly exceeded at any time $40,000,000, and the rate of increase in exports, although steady, has been only one-third to one-half as rapid, namely, about three per cent. per annum. In comparison with other exports, however, the exports of forest products has considerably *declined*, for while in 1868 these form 34 per cent. of the total exports, in 1904 they represented only one-half of that figure. To my mind, this falling off of wood exports would appear as an advantage, if it were the result of policy and not of natural decline in accessible supplies. It is, also, to be considered an improvement that the proportion of lumber and manufactured wood goods, as against unmanufactured material, has constantly increased during the last decade, namely, from 5 per cent. to 12 per cent. of the total exports of forest products.

The Census of 1891 made the total forest production of Canada $80,000,000 ($16 per capita), the cut being figured at 1,400 million cubic feet for home consumption, and 600 million for the export, or altogether over 2,000 million feet, say 400 cubic feet per capita, a figure not very different from the per capita consumption in the States, but *twenty* times that of Great Britain.

Our Present Wood Consumption.

If we apply the same rate of consumption to our present population, which is probably not much below 6,000,000, we can safely place our present wood consumption at round 2,400 million cubic feet of actual material, which, with existing standards and wastefulness of logging, represents not less than 3,000 million cubic feet of wood as it grows in the forest. That is the annual growth of not less than 50 million acres under good management, and of three to six times as many if left to mere natural growth. I bring forward these crude and not altogether reliable figures to make you realize the fact that it is time to change the attitude towards the treatment of your timber resources, and that those who supinely laugh at the efforts of the forestry propagandists are either ill-informed or unpatriotic.

To Ensure Future Crops.

I have no doubt that when the Secretary chose the word Reforestation as the title for my remarks, he had nothing more in mind than to estimate the general subject of forestry, which certainly implies reforestation, artificially or otherwise, that is, the use of existing forests in such a manner as to insure future wood crops. Technically, there are no mysteries as to how this may be done. Some knowledge of the life history of the species composing our woods, and some knowledge of what experience has been gathered during the last hundred years or more by European foresters suffices to permit a judicious man to direct nature in doing his will. For, there is no question in spite of some uninformed doubters, that the technical knowledge gathered in the Old World in forest growing is as applicable in the New World as the knowledge of growing cabbages.

The difficulty of reforestation does not lie in the technical but in the *economic* direction. The question is not, "Can the White Pine be reproduced, and how?" but, "Can I afford to do the things which are necessary to reproduce it?" As far as private forest owners are concerned, it is purely and absolutely a financial question, as to whether it pays better to practise *destructive* lumbering or conservative lumbering, which is the beginning of practicing forestry.

The Economic Side of Forestation.

The answer to this question is, of course, a matter of calculation, as in every other business; the same factors which enter into profit calculations in other business enter here. There is only one factor that is essentially different and

characteristic in the forestry business, namely, the time element. In this it differs from every other business except life insurance. The manufacturer deals with months, and possibly a year or two which elapse between the receipt of the order and the delivery of the goods, the farmer reaps annually, and the fruit grower within 10 years from starting the orchard. But to grow a log of useful size takes from 60 to 120 years. Most of the trees which the lumberman cuts to-day, are over 150 years from the seeding time, and, while the forester can to some extent hasten the processes of nature, he will only rarely bring acres of forest growth to utilizeable size for lumber in less than two generations.

Let us look into this important factor of forest production and see what it implies. In the first place, the forester must be a seer into the future. He must feel sure that his crop will be in demand when it matures, that it will meet the changed requirements of a different civilization, that it will be able to compete with other materials which can be used as substitutes, and finally that it will pay for its production.

A Permanent Demand Exists.

Nobody who has studied the history of the world as regards wood consumption, and who has realized the reason for the extensive use of this most useful material, will doubt that, as long as civilization lasts, wood in some form will be a desirable and much-sought material, that cannot be displaced entirely by any substitutes, but of course the character and form and amount of its use may greatly vary.

No more interesting experience on this score could be cited than the ups and downs of the beech forests and tanbark forests of Germany. The latter have become unprofitable by the introduction of quebracho tan. The former, a result of the fuel famine of a hundred years ago, became a drug in the market, when coal was developed, then became valuable again for railroad ties (impregnated), these being displaced by metal ties, and now only by compromise between the Railroad and the Forestry Department do these beech forests find a market.

We see, then, that the time element in forestry is a *speculative* element which may all but ruin an otherwise legitimate business.

The time element, naturally, renders the financial calculations somewhat hazardous. What prices will rule when our crop comes to market? What interest rate shall we figure on the long time investment? What expenditures can we afford now with the assurance of profitable returns? These are all questions of a speculative character. Forestry really is dealing in futures!

We may have no doubt that wood prices will increase, as they have increased in the past; indeed, for a time at least, at a greater rate than in the past, for within the last decade not only has the per capita consumption of wood among all civilized nations increased at a rate of about 3 to 5 per cent. compound per annum, but all the exporting nations have waked up to the realization that their forest resources are not, as they had supposed, inexhaustible, but are, indeed, measurably near the time of exhaustion, and have begun to appreciate their value, and have placed bars on their exportation, or otherwise limited the cut.

Wood prices in Prussia for 65 years prior to 1895 experienced a rise of 1½ per cent. per annum. They doubled in the next 35 years, and rose 50 per cent. in the next 30 years. Since the 15 years from 1890 to 1905, the rate of increase has been nearer 2½ per cent., namely, from 4.4 to 6.8 cents per cubic foot.

In Canada, from 1850 to 1894, the average annual rise has been not less than 5 per cent. You know how much more rapidly it has risen since.

In the United States, the rise has been for some time at 2½ to 3 per cent., and in 1900 precisely the timber famine began, if sudden high prices denote dearth.

There is no doubt that wood prices will rise and that quickly, but where is the limit, the definite figure which we may use in a calculation made to justify a present expenditure?

A World Price for Timber.

I believe we would be safe in expecting that within the next 25 years, when the United States and Canada will have pretty nearly careered through their entire timber wealth, will have learned to use wood economically, reducing their quota from 350 to 400 cubic feet per capita to 20 or 30, as is possible, and when all other nations will have done the same, namely, have nearly exhausted their natural timber growth and have come down to forest management, that then we shall have also come to world prices for wood as with other staples, and that probably the highest prices now prevailing in the interior parts of Europe will be ruling prices in general. Such prices will make common pine stumpage not less than $20.00 per M.

As regards interest rates on such long time and, at present at least, hazardous investments, who will venture to suggest a proper figure? In Germany, where forest property is as safe as any other even as regards fires, it is customary to apply a rate varying between 2 and 3 per cent., compound, of course, if, or whenever, such calculations are made at all. For, although Germans are undoubtedly good business men, and know as well as the next neighbor how to figure, the forestry business is carried on very largely on other considerations than strict financial calculations. These considerations are partly general economic ones, partly of historical character.

Forestation a Government Duty.

The State Governments became large forest owners somewhat over 100 years ago, and they have learned to consider themselves the guardians of the future as well as of the present, hence they have persistently and jealously carried on a conservative forest policy, without permitting financial considerations to interfere with cultural ones. Forestry with the Government was a duty, a work of internal improvement, which could not be expected from private individuals. That in the end this work has paid handsome revenues was, of course, more than gratifying. There are even now in the German forest administrations many things done that would not stand a strict financial test.

City and town corporations were forest owners long before the States, for German communities were originally socialistic republics. The States assumed surveillance of the management of these properties, partly for fiscal reasons, partly for the same reasons that actuated them in the management of their State forests, so that about 50 per cent. of the forests of the country are under direct State control. Of the balance, owned by private individuals, a portion is subject to entail, family estates which by agreement of the noble owners in times gone by are under certain fiscal control by the Government, and another portion is also under partial control, to prevent mismanagement which would cause damage to neighbors or to the country at large.

We find, then, in the end, that only about 25 per cent. are left unconditionally to private will, and, if you want to see mismanaged woods in Germany, you must hunt up some of these private forests without State supervision.

There is now—and has been in progress for some time—among foresters a battle royal as to the proper way of figuring the financial results of forest management, but no agreement

has been reached, and even the necessity of such calculations, for the governments at least, is not admitted by many. Meanwhile the Governments and the supervised corporations and private owners reap the benefit of their persistent, conservative policy and of their improvements in the forests and in the forest service in the shape of continuously increasing revenues—true revenues, not derived at the expense of capital, without decrease nay with rather added value to the investment and increased per-acre-production.

The Prussian State forests, for instance, with some seven million acres, yielded in 1850 a net revenue of less than 50 cents per acre; in 1890, $1.30; in 1905, $2.43. In Saxony, on a smaller area, somewhat over 400,000 acres, the felling budget was 60 cubic feet per acre in 1820, 70 cubic feet in 1860, 90 cubic feet in 1890, and 93 cubic feet in 1905; the net revenue rose from 95 cents in 1820, to $2.39 in 1860; to $4.37 in 1890; and is now (1905) $5.25.

But to attain these results the Government had patiently to wait, patiently to spend money and energy and knowledge, like any other business man who is building up a business—only for a longer time, for a hundred years.

What private forest owners will work for such a long time and maintain an undeviating policy of conservative management?

There is one other aspect in this long time element that has much to do with the aversion which private capital has shown almost everywhere to this kind of business.

When Timber Becomes Marketable.

The maturity of timber, the ripeness for the axe, is not a matter of natural period, but of calculation and consideration of its marketableness. The year's growth cannot be harvested or marketed; it requires an accumulation of annual growths before a tree becomes useful. When the crop is 20 years old, it may furnish small firewood and possibly some posts; at 30 to 40, besides fuel, there may be telegraph poles and railroad ties; at 60 to 80 years, small log timber will have developed, and then this will increase in proportion constantly for the next hundred to two hundred years, quantity as well as quality improving. Now, this method of accumulating the harvest and being able to cut it at various times at our choice brings with it, just like a life insurance, a continuous locking-up of capital and interest, which only a capitalist, a man of means or a strong corporation, can stand. Thus, a 100-year-old stand of pine has not only locked up the soil and whatever initial investment was placed on it in the way of planting or otherwise, but it has also locked up the interest, a 100 years of growth, accumulating, say, 6,000 cubic feet of wood per acre, worth, say, $200 at least.

Large Capital Necessary.

In order to turn wood crop production into an annual business, it would be necessary to have one stand become ripe or 100 years old every year, so that we may have a regular annual harvest—that means 100 such stands differing by a year in age. The capital involved in such a series of 100 age classes, as it is termed, would figure up according to different soils and species from 400,000 to 1,500,000 cubic feet, and probably not less than $8,000 for the 100 acres. To make a living from forest growing as a business, you can readily see that not less than 50 such series, worth not less than $400,000 in the wood capital alone, would have to be kept up to insure an annual income of $10,000.

These calculations are, to be sure, only schematic, and would fall out more favorably here and there, but they give you an insight into the character of the financial aspect of forestry. It is a business for large capital, with long time investments.

Who will be willing to lock up his capital in such a business, especially in this country when still thousands of acres of grown timber are practically being given away, as in British Columbia?

The possibility of harvesting earlier, of lowering the rotation—as the length of time is called to which the crop is allowed to grow—is a constant temptation to do so, and, as a matter of fact, we find that in France, where private ownership prevails, the rotation has been constantly reduced, until now little more than firewood is grown on the larger portion of the forest area, and the bulk of sizeable material has to be imported.

Where Responsibility Rests.

My object in bringing these financial considerations before you is to point out that forestry financially defined means every time curtailing present revenue or making present expenditures for the sake of future revenue, that there is no good reason why we should expect timber limit holders as a rule to adopt forestry methods, voluntarily, that finally the State, the Government, the people as a whole, being the guardians of the future of the nation as well as of the present must realize that forestry is *their* business, that they alone can take the risks and the low interest rate which this business offers.

Private owners and timber limit holders may find it to their advantage here and there to do things, or rather to avoid things, the doing or avoiding of which will insure a better utilization in the present and a better future for their holdings, but ultimately I have no hope of an effective forestry system being introduced unless the governments are thoroughly committed, change their methods of disposal of timber, and introduce forestry principles in their land management.

Present Forestry Methods Must Go.

The proposition of a change of methods from the current ones does not necessarily imply a criticism of the latter. The methods as they exist are of historical growth and, where devised for pioneering conditions and with a different purpose in view, namely, to secure income and to open the country for settlement, and for these ends they probably were the best that could be devised. But the time is here, if I am not mistaken, or rapidly approaching, when it will be wisdom to change these methods, when a new purpose is to be substituted, when not merely present profitable exploitations, but the future needs are to be considered, and hence new methods are in order.

Some one has, with cogent logic, shown that the present method of disposing of timber limits under the triplex charge of ground-rent, bonus and stumpage dues, discourages the application of conservative logging methods on the part of the timber limit holder.

But I go further and maintain that the timber limit holder cannot, under *any* system of lease, be expected *voluntarily* to introduce forestry methods. It is the Government that must take the risk and stand the cost which new prescribed conditions of logging involve, and enforce such conditions.

There can be little doubt but that the Government alone can take care of the future, and whatever else may be said about Government ownership of public utilities, the long-time element in forest production singles it out as the most needful of Government activity.

Fortunately, in the Dominion the Government does own the basis of forest production, the land itself and the virgin as well as the cut-over forest—at least, the bulk of it. Can there be two opinions as to whether it should manage this property as a permanent investment, or merely exploit it for what is in it, placed there by nature?

A rational policy requires that a distinction be made between the lands that are only fit for timber growing and those which are more advantageously turned to farm use. There will then appear some land to be doubtful as to its classification, but that should be also left to timber-growing, until good reasons appear for settling it, *i.e.*, until the time has arrived when second class farm lands have become profitable and are needed.

Fortunately, timber will grow, though less rapidly, on the poorer soils, which lack in fertility or are physically difficult to farm, and hence there should be no quarrel between farmer and forester.

On such areas set aside for forest growing—forest reservations—the Government should dispose of the timber systematically in such manner as to make sure of a future crop, *i.e.*, practice forestry.

This requirement is bound to bring the Government to a double dilemma, an economic and a political one, namely, how far to consider the present and how far the future, but sooner or later, if the necessity of forestry is once admitted, it will have to choose the one horn which points to the future.

Hitherto, the Government has desired to secure an *income* from the timber before the land was to be settled or else has made the timber a source of income without the settlement in view. I do not use the word revenue, which implies a continuous income. Indeed, the policy proposed of introducing forestry methods means change of the temporary and limitable income into a continuous revenue for ever. Every one of you is financier enough to see, even if you do not realize the exact method, that that cannot be done without some expenditure or without curtailing present income.

This is the economic dilemma; the Government must be willing to forego or spend part of the present income in order to insure a continuous future revenue. I understand it can well afford to do so.

The political dilemma is, how to deal with the timber limit holders, and this, I dare say, is the more troublesome.

I know enough about the situation to recognize, first, that this is a complicated problem and, secondly, that I dare not even suggest the simple solution which the mere student of political economy and statecraft would readily propose, namely, to cut the Gordian Knot and make an all-round new and square deal.

Present Lease Holders.

There are, if I understand the situation correctly, three classes of limit holders (which may, of course, all three be found in the same person), namely, the limit holders of long ago, those of recent origin under changed conditions of lease, and those of the future. I also understand that, although the Government in the leases granted to the first two classes has reserved the right to change conditions of lease, usage has made this condition nugatory.

There are many objectionable features in these leases, but the worst feature of these earlier leases is that practically they do not terminate, and hence the much-praised ownership by the Government is a delusion, and the Government is apparently debarred from using its property, or having it used to the best advantage. It would appear that as long as any young growth of pine which may grow into timber exists on a limit, this is vested in the limit holder.

Unless, then, the Government can assert its rights and regain full possession of the property, either by adjudication or by compromise, or by imposing new and troublesome conditions for retaining ownership, these lands must be left to fate and the despair of the future.

The hope of the future must be found in the new deals the Government may make with the future limit holder, and this it should do with a full reckoning of the future.

It is needless to add that to carry out such a forest policy technical advice will be needed, and it will be my pleasant task to prepare young men for this business.

The Advantages of University Training.

I have been asked whether the young men graduating from the University in the Faculty of Forestry will be fit to manage forest properties I rejoin with the question whether you would entrust your life to a young physician just from the medical school. Managers are not made in school, they are either born like the poets, or they develop, as their judgment is developed in contact with realities and concrete things. But the technical knowledge imbibed during their training should stand them in good stead in accumulating and digesting experience, and thus in developing quickly into managers. When leaving the University they will have all the necessary theory, and more than needed for the present. They will have knowledge of woodcraft and they will have come sufficiently into contact with the practical problems of forest management to be useful in developing it.

Our aim will be to turn out men so well grounded in theory that there shall be no question as to their becoming the most practical men in the woods—not excepting the logging boss.

From you, as interested citizens, I hope to receive moral support and active interest in bringing about such a forest policy of the Government, as will give employment to this coming generation of foresters.

The Fire Fiend.

There is one feature of our forest conditions, without reference to which no discourse on forestry matters on this continent would be complete. I have left it to the last in order to make, if possible, a more lasting impression on you and to enlist your co-operation in eradicating it. There is no use talking about forest policies or forestry methods, reforestation and conservative lumbering until we have learned to cope with the fire fiend.

This is almost entirely a moral problem, in which all the people are involved, for the majority of forest fires are due to culpable carelessness—a carelessness quite general on this continent, born of a lack of a sense of civic responsibility. If there were a higher moral tone in the community, a greater care of other people's properties and interests, there would be fewer forest fires. The majority of these fires, I have no doubt, are due to preventable causes.

The origin of fires from locomotives, I believe, could be almost entirely stopped by application of a newly-devised screen, the invention of a Canadian, which overcomes the objections made to screens by engineers. It is applied on the outside of the stack, hence does not interfere with the draft, and is always within view for inspection.

The fire ranger system in use by the Ontario Government is good as far as it goes, but it is by necessity limited. Its development depends, to a large extent, on the desire of the limit holder; but it is often not at all to the interest of the lumberman, to guard effectively against fire, since the greatest danger from this menace is on cut-over lands and young stands of coniferous timber, in which the lumberman is not financially interested. Its weakest spot lies in the temporary employment of the fire rangers, who, therefore, shift from year to year, and in the fact that they have no permanent interest in the forest. Not until a real forest policy is introduced and foresters, employed all the year on some forest work, become its guardians, will the forest be efficiently protected at a reasonable cost.

Technical Education—An Industrial Necessity*

By JAMES A. EMERY, Secretary Citizens Industrial League of America



J. A. EMERY

I have expressed so frequently to your individual members my sense of privilege and pleasure in the prospect of addressing your Association that I feel I need no more than say "ditto" to myself with regard to that individual expression and again thank you for this opportunity to meet you, and not only to meet you and realize the character of the men to whom the industrial destinies of Canada are committed, but to receive that strong impression which in itself is a valuable lesson of the quickness with which this nascent nation has learned the lesson of unity of action. Coming from a nation that points with pride to a National Association of Manufacturers, numbering three thousand members and representing some twenty billion dollars of invested capital, it is a pleasure to realize, as one who springs from the same blood that you do, that here in Canada you have out-yankeed the Yankee in your numbers and power; that you have learned the lesson of the way to meet honorably commercial rivalry with due regard for the future interests of your nation, and to create a national organization of manufacturers in which the bitterest of individual competitors can meet on the common ground of national welfare, struggling shoulder to shoulder to do as much as his competitor can do to bring about a condition of principle in which that future is assured.

Twenty years ago such a gathering of competitors would have been a practical impossibility; it would have been almost sure to result in a condition of affairs like that described by little Marshal Wilder, as attending a gathering of Irishmen in San Francisco, who were celebrating a little social evening. One of the friends of the host of the preceding evening met him next day, and being invited into the house, passed down through the walk to the door and noticed it hanging on one hinge; he observed that the hat rack was injured and stood somewhat poorly against the wall, that the carpet had here and there its tear, that the furniture scattered through the house all showed the marks of hard usage. Finally, arriving in the dining-room, he noticed the table staggering weakly against the wall, and pieces of the dining-room furniture uncertain in their ability to stand on their own feet. He halted and said, "Well, Dan, you must have had a fine time here last night." Dan said, "Yes, they all expressed themselves as being rather satisfied." He said, looking around over the room, "My heavens, man, you are an extravagant cuss. I know there is no one treats his friends as you do, but a man that will do what you did, buying grapes this time of the year for a gathering such as you had last night must be out of his senses." The other looked over the floor at those evidences of the preceding evening's pleasures and he said, "Grapes! grapes! you chump, them is not grapes, them is eyes." (Laughter).

Friendly Competition.

A gathering of competitors twenty years ago might have resulted in another means of settling such disputes as you gentlemen have engaged in here in the last two days. It is a wonderful age in which you participate, that the manufacturing mind of Canada can unify itself for action, that in a day in which all the intelligence of life has been brought into quick intercommunication, you can gather into one room the manufacturing mind of Canada. For after all it is only the individual human being who is ignorant. The race and the nation are very wise. If it were possible to accumulate from all its stores the vast fund of human information in the possession of various individuals and put it into a mind big enough to hold it, with a judgment sound enough to use it, of what advantage to your race could such a mind be? And of what advantage to a community and nation like this it is to have you meeting together to consider the best means of directing the industrial future of Canada.

The Place of Industrial Education.

And, gentlemen, I conceive that there is no one instrument that offers so much to the future of your industry and the future of the meanest citizen that shall stand within your borders as the prospect of practical, systematic, wide-spread, industrial education. Scarcely two months have passed since the splendid educational institutions that grace your city turned out into the commonwealth hundreds of young minds to exchange their almost top heavy burden of wisdom for a practical living. The young physician has gone forth, lancet in hand, to carve his way to professional success (laughter); the young lawyer has raised the hopes of the prisoner in the dock; the young clergyman the prospects of theological unity; and the young lady, the joint product of four years' of education and three dressmakers, has rivetted the attention of her audience as she gracefully delsarted down the aisle for the reception of her diploma.

In the nation from which I come, I can say to you, gentlemen, with confidence in the truth of my utterance, that it is far easier for a man to become a lawyer, an electrical engineer, a civil engineer, a doctor, a clergyman, than it is to become a first-class dyer or a perfect plumber (laughter); and yet, sirs, is the necessity for such individuals in our community generally perceived? Is there anyone within the sound of my voice who doubts that you need plumbers, dyers, carpenters, bricklayers; that you need mechanics and machinists in every skilled branch of manufacturing industry; that you are looking for men of whom you can make competent foremen, supervisors, floor directors? Is there a man among you who has not a place for a first-class practical mechanic, the man trained in the technicalities of your particular industry?

Our Faith in Education.

We come of a people that value education, that put into magnificent institutions of stone and marble the expression of their belief in culture, refinement and learning, that are turning the best minds of the age to the training of the youth of the land; but are we training them, gentlemen, with consideration for the fact that for every professional man that enters into life there are a thousand on the farm, in the forest, in the factory, who at an early age of life must forego the advantages of higher education for the practical calls of every day life. In the United States, of approximately six millions of school children that annually enter our public schools, less than two hundred thousand on an average pass the high schools, less than one hundred thousand secure the advantages of the Collegiate Institute, and the vast remainder, owing to the compulsion of necessity, of inclination, of ignorance of the value of education if you like—owing to hundreds

*Address delivered at the Toronto Convention Canadian Manufacturers' Association.

of those impulses, the pressures, and calls, and obligations of commercial, mercantile and business life, leave their school rooms to gain for themselves a way in life; and if it is a mark of an age of civilization to supply opportunities for that hundred thousand that are to be the professional lights of the nation, what shall be said in a democracy of the claims of those millions upon whom the future nation depends? Sirs, I think I may lay it down as a proposition that may be absolutely demonstrated, that not only the industrial future of your nation as a whole, but the happiness, the material prosperity and contentment of your individual citizens, your progress along the pathway of civilization, are dependent upon that which each individual shall bring to his daily task. Nay, more, the very standard and measure of that progress, of that inheritance that supplies the forward movement that shall be handed down to your posterity, are dependent upon the efficiency and the skill with which the men of Canada of to-day take up their task.

Labor, A Divine Law.

For, sirs, it is not a thing to be criticized, because it is a fact of creation, that men come into this life with a burden of labor laid upon them. It is a burden from which no man can escape. It is not only the tax that he must pay for life, it is the treasury out of which he pays his way through it.

The Creator, in placing upon man the task of earning his living, provided him also with the means whereby he might determine the kind of living he should earn. Upon his own labor he is dependent, not simply for the necessities of life for himself and those depending upon him, but for all those conveniences, those refinements and those luxuries that make up the sum of civilized existence in our day and in our hour. So that in placing upon man the burden of supporting himself and those dependent upon him in his journey through life, the Creator also supplied him with the treasury out of which he should pay for that passage.

The Source of Wages.

And I think we can lay it down as a further fact, that there is no possible source out of which labor can be paid or its wages advanced except out of that thing which the hand and mind of labor produces; and that, therefore, the reward that labor shall have for its effort does not depend upon the whim and caprice of men; it is not something that is dependent upon the charity of an employer or upon his generosity, or upon his smallness; it is not something seized either from the profit of capital or from the wages of labor, but it is something that is dependent upon the effort which labor makes for itself. If I am the producer of this table there is no possible fund out of which I can ever pay for its production except the table itself. If I am the producer of that chair there is no possible thing out of which I am to be paid for my share in the production of that chair except the sum which it fetches upon sale; and not only am I who gave this chair its ultimate shape to be paid from the fund which its sale produces, but every single factor in the production, from the hand that laid the axe to the root of the tree from which that wood came, to the hand which exposes it for ultimate sale, is to be paid from that chair; and if I receive more than is my proportion in the production of that chair it must be at the expense of someone else who contributed to its production and gets less.

There is then absolutely no fund out of which labor can be paid for its share in the production, its wage, except the thing which it produces. It cannot be paid more than its share, otherwise it does injustice to him who employs that labor and drives away from it the investment of capital engaged in the production. It cannot take less, otherwise if profit is being taken from the wage of labor and unduly added to the profit of capital, other capital tempted by the opportunity there presented of investment is immediately attracted into that particular industry. Let there be a change of five or ten per cent. in the rate of wages between Toronto and Montreal, and there is no marked migration of labor from this point to that, because that which labor has to sell is a part of his own person, and labor has social ties of family and it cannot easily transport itself from point to point; it must consider the cost of motion not only of itself, but of those dependent upon it; it is, therefore, in the very nature of things, attached to some extent to the shackles of locality. But capital is as free as the air. Let there be a change of one per cent. in interest between Toronto and Montreal and money flows from Toronto toward Montreal; for capital may invest itself in Hong Kong, in London, in Paris, in Pekin, in Berlin for the cost of a postage stamp, or in the twinkling of that rapid motion of the electric current that transmits the message of the telegrapher.

Greater Rewards Follow Increased Production.

Labor, therefore, being dependent upon its own product for the reward of its labor, cannot, economically speaking, obtain a greater reward or a greater share of its product unless economically speaking it produces more than it did before. So that there is no certain, secure and permanently economical basis upon which wages can be increased or the profits of capital insured except increased production. (Applause.) You cannot on the one hand decrease production and increase wages; you cannot have more to divide unless there be more to divide. You cannot increase wealth except by adding to it; for it is not the fiat of a word, but it is the effect of energy applied and producing. (Applause.) The permanent reward of labor, then, and the permanent profit of capital are dependent in their continuous increase upon increased production. Increased production can be secured, other things being equal, only through multiplied mechanical labor-saving devices, which assume a better brain and higher intelligence not only to create but to sustain it, but also superior skill and efficiency on the part of the producer.

President Roosevelt said, "It is the man behind the gun that makes a Navy." The voice of experience and industry says, "It is the man behind the machine that makes an industry."

Methods of Production Revolutionized.

Now, in this day and in this hour, the marvellous improvement of the race, its wonderful development of material resources, its wonderful control of natural forces has revolutionized the whole science of production. It has not only enabled men to produce faster, but it has enabled them to produce cheaper; and it has connected the seller with the customer at points which one hundred years ago were beyond the range of its activity, if they were not even beyond the ken of its knowledge and vision. You do business to-day between Toronto and Chicago easier than your ancestors of two generations ago did between Toronto and Montreal. We have made ferries of the ocean; we have bound the whole vast earth with the steel bonds that send the blood of commerce throbbing through the highways of industry; we have taken the lightning from the skies and made it the hand-maid of man's effort. The very forces that aroused the superstitious fears of our ancestors have become the servants of their posterity. (Applause) And with this vast mass of forces and energy at our disposal we have multiplied a thousand fold the producing power of each unit of labor to earn more for itself because of its increased capacity for production.

Pre-eminence of the Individual in Commerce.

We live in an age, it is true, of consolidation and organization, in which, as one gentleman said here yesterday, it seems as though the individual were lost. But, gentlemen, there is no consolidation or organization in industry that is not to-day as dependent as it ever was in the whole history of mankind upon individual leadership and supervision. If the world moves faster because quicker individual minds guide it more actively upon the pathways of rapid progress; but it is as dependent as it ever was upon systematic organization, co-ordination and direction. Hence it follows with respect to labor and with respect to capital, that permanent increase of wages and profits is dependent upon permanent increase of production, and upon that alone. Then those causes that tend to the direct immediate increase of the producing capacity of the individual, by increasing his skill and efficiency, are the great and exclusively potent factors in the increase of individual progress.

We Never Needed Industrial Efficiency More.

You tell me perhaps it is not so important that the individual be skillful because we have in our day a thousand varieties of labor-saving devices, a thousand machines that multiply with ghostly fingers the weak and impotent individual activities of men. Sirs, the race was never more dependent in all its life upon industrial efficiency, not only to maintain what civilization has added to the producing factors of industry, but to improve and better them for the years that are yet to come. With one hundred years of wonderful progress, in comparison with the industrial possibilities of the future, we have but touched the very outskirts of probability; as Newton said when complimented for the wonderful things which he had done for human progress, "Why, gentlemen, when I consider beside what I have thought and conceived the infinite possibilites of the race I feel like a child that has stood upon the edge of the sea and dipped from it with a spoon."

The Individual Supreme.

And you, sirs, like I, come of the races that desire to stand supreme among the nations of the earth; we come of a people, we represent a blood, we express principles of governmental and civil action that depend for their success upon the individual that is the basis of the civilization we seek to create. If then we rest upon principles of that character we rest the finality of our success upon the individual progress of our race, upon the moral improvement of each individual, upon the industrial improvement of each individual, and as we hope for a better moral civilization we must look to the moral enlargement and the moral advancement of each individual; or if we look for material progress or industrial advancement we must look to the preparation of the individual who is the sole factor and who alone makes such advancement possible.

A Lesson From Germany.

Do you want an example of what can be done in that way? In 1876 at the American Centennial Exposition, the German Industrial Commission sent over by the then Emperor of Germany, Frederick of Prussia, reported back, after an exhaustive examination resulting in a comparison between methods and results in the production of Germany and other nations there exhibiting, that the German exhibit was cheap but rotten. Germany then occupied an inferior position among the manufacturing nations of the earth. Under the wonderful reforms inaugurated by that Emperor and continued by his successor and the present Kaiser there has sprung up in Germany the most remarkable system of Industrial Education systematized and organized existing in any nation of the earth; and Germany in practically a quarter of a century, with not one fraction of the natural material wealth of Canada, with a population that man for man is not the intellectual superior of the Canadian, with the competing markets of the world practically held by her rivals, without either the most modern machinery or mechanical genius that seems to have the capacity to provide it, by systematic industrial education, by the development of each single individual industrial unit in German industry, has come from the very rear rank, and in thirty years of manufacturing activity is second among the nations of the world as an exporter. (Applause) And it can be traced to no other single thing than systematic industrial education. (Applause)

Now, if that is the reward of effort, gentlemen, is not the effort worth while? If you are bonded together at this early point in Canada's National life with the realization of the wonderful possibilities of this rich Empire that surrounds you, with the task on your hands of developing it for your personal profit and for the advancement of the Nation of which you are proud to be citizens, isn't it worth while to consider now and here the giving of your activities to the systematic establishment of methods of industrial education that will assure you that while you manufacture products you are also making men? That while you are building an industry you are creating the mechanics that can not only sustain but advance it; that you will be depending no more upon the nations of this earth for men than you will for material? You are proud to think that within the borders of your Dominion you have every natural resource that can make Canada worthy of Canadians. Haven't you also within the boundaries of your nation the men that can sustain, build up and perpetuate your industries? You would not ask to be placed in a situation in which you would be dependent upon the nations of the earth for food for the mouths of your people, for material for your machinery to work upon. Yet, are you not to-day, and is your Government not to-day, pursuing a policy that eventually will lead to this, that Canada, as she grows in industry, will not have men equal to meeting the demands of labor and leadership? It is a natural thing; it is an unavoidable consequence of the youth of a nation; it is an unavoidable effect of rapid growth, that you should necessarily look to older nations for the factors that are to support your industry. But in doing so it is the part of wisdom to provide that in your growth at each successive step you shall become less and less dependent upon them for the human factors that are to sustain and perpetuate your industry; and as you build up that industry you shall build up in Canada the individuals who will perpetuate it (applause); and in doing so you are not alone providing a means of livelihood for the Canadian; you are not alone providing employment for your citizens; you are providing the greatest moral safeguard with which a nation can surround its people, knowledge and the capacity for doing one task well. Man is so constituted that you cannot train his fingers without leaving your impress upon his mind; that you cannot make him a good mechanic, a good lawyer, a good doctor, a good clergyman, without also making him at once a good man and a good citizen. You cannot give a man the settled and fixed means for earning his livelihood, you cannot bring him to a realization of his relation to the general factors of industry, without bringing him to a sense of responsibility in the upholding of them. You cannot train him to industrial efficiency without giving him also the opportunity for attaining to the highest moral efficiency.

It follows, therefore, gentlemen, that if the nation realizes the necessity for training good lawyers it should stop quick and think sharp as to the necessity for training good mechanics. Remember, gentlemen, that if there is one right in this life that the English-speaking races have ever struggled

to make clear, not only to themselves, but to the rest of the family of nations, it is the right to labor. The right to live includes the right to labor. Moreover, there is an obligation in society corresponding to that right in man, which shall protect each individual in his right to labor. Society is obliged further to provide him with the best possible means of making the most that is in him, in order that he may profit by his own labor, and that the nation of which he is a part may receive the highest reward from his efforts. For the same God that made the flowers of the field, that gave the skies their stars, that surrounded all creation with the diversified beauty of nature, provided also an abundance of diversified talents among the children of man, that every possibility of human effort might be developed by that peculiar skill which the Creator gave to each individual for some particular pathway of life. The child as he thrives under the sunlight of parental love shows in a thousand ways his tendencies, his abilities, his one movement toward a true livelihood. It is for society, recognizing the part that the Creator has played in supplying it with the means of diversified development, to gain for the nation the development of those natural gifts, the entire fruit of their action; and it is by industrial education along material lines of activity that those diversified talents are assured, not only for individual reward, but for commercial advantage. The recognition of these principles tend after all towards the facts of creation that are driven home to us by daily experience. Let us not be like that most unhappy and yet apt figure in Virgil, the weakest of human beings, he, who *video meliora sed deteriora sequor*, "sees and approves the better course but follows the worse."

If you realize the advantages of industrial education to yourself and Canada, see that you have a unified and harmonious power building it up in this Dominion; utilize the forces that you represent to make it a distinctive Canadian movement; remember that as you are basing your belief in this thing upon the principles that are as sound as the moral law itself, you should confidently give it the publicity that will drive it home to the minds of your people. You shall have behind you the overwhelming force of a popular judgment to give it concrete reality in Canadian life. (Applause).

Let your Government understand that what the Canadian manufacturer struggles for, in securing a system of industrial education, is not his profit and his advantage, but the development of Canadian citizenship along those broad lines that mean the highest development to every single citizen who participates in them. There is no one thing upon which employer and employee, the manufacturer, the machinist, the workman and the master can be so thoroughly united as in a method of industrial development which will combine material profit with the surest moral gain. Gentlemen, knowing as you do the tremendous possibilities of this wonderful heritage you possess, stand together to secure the right of the working man, sometimes against his own ignorance, sometimes against those who misrepresent to him the things which are for his good; stand as a unit against your own kind when they are mis-guided and short-sighted or prejudiced in their dealings with their workmen. Let this prosperity which we have talked so much about be based upon the lines of permanent, fixed, moral action. For after all what is prosperity? Nothing but an abundance of commodities fairly distributed; and there is no means of securing that abundance except by intelligent skilled production; there is no means of securing its fair distribution unless we live an economical life that realize economics; laws as certain in their application as the fall of the apple from the tree beneath the impulse of gravitation.

Increased Consumption Accompanies Increased Production.

There are those who, not having the mind, perhaps, and not clearly seeing or grasping the thought, declare they want no industrial teaching, no trade training, because it means the development of too many workers. That is founded upon the theory that the jobs which men can do are like the hairs of the head, numbered and defined, and when job 1088 has been reached, 1089 cannot be born, for there is no demand upon which to base it. This would be true enough if the limits of production were definite, but practically speaking the limits of human production are indefinite. No sooner does a man apply himself to a new industry than he creates the employment of a thousand new hands. The Creator has so fashioned us in his goodness that he has made it absolutely impossible for a man to better himself without bettering others; so that even the foibles and extravagance and weakness of humanity itself help others who participate in the fruits of that extravagance, if they do not share the weakness itself Vanity cannot deck itself with a dress that one hundred hands are not turned to the needle. Pride cannot build for itself a castle that a thousand hands do not find employment for themselves and bread for those dependent upon them. Learning cannot erect its temple of wisdom, art cannot found its shrine, religion cannot raise its cross to the blue sky of heaven, without giving employment to a thousand human hands to assist in the rearing of that superstructure. These not only share in the benefits of the completed work, but also are paid their share in each step of its progress. Wonderful is the kindness that has disposed such things about us. It only rests with us to keep clear the judgment that perceives them.

Realizing these things and fulfilling these principles the Canadian Manufacturers' Association moves on to the fruition of the highest ambition and the noblest realization of life of this great Dominion; securing for every one of its citizens the opportunity of earning a living in the manner in which God has given him a vocation. Your reward will be that you will not only guide a great and successful industry but a prosperous and contented staff of workmen. Your success will be builded upon the general education of your workmen, upon their realization of their relation to you and upon their development each in his own capacity of those moral and mental activities that alone insure the fullest development of the human mind and the fullest reward of human effort. (Applause).



Ontario Legislative Buildings

The Twentieth Century Belongs to Canada*

Some Illustrations of Our Growth in the Last Six Years

By ARCHIBALD BLUE, Chief Officer of the Dominion Census

TO one not wholly a stranger, who at intervals of say half a year may stand on a corner of King and Yonge streets when the employees of business houses and workshops are going to their homes at the close of the day, it is obvious that Toronto is a growing city. He observes it in the closer throng on the walks, in the greater scramble for cars, in the tenser look of human faces, and in the hurry, hurry, hurry of human feet. For twenty-one years I lived in this city, and was on its streets daily, and knew many of its people. In the last year of last century I went elsewhere to live and work, but I have not been altogether a stranger here. Six months ago I walked from the Parliament Buildings to the King Edward at the noon hour, and although Yonge and King streets were alive with men and women the only face I saw and knew was Sir Wm. Mulock's, and we just nodded a recognition and walked on as if our meetings for the past seven years had been a daily happening. The unknown faces and the number of them told me the story of the city's growth as well as a census. It was an ocular proof, which if not as exact is more striking than a count of heads. But what one sees with the eye lies within a narrow circle, and as I purpose in this paper to offer some illustrations of the growth of Canada in the twentieth century I shall employ the only data that have value in mathematical demonstrations. Nearly all the great discoveries of science, Lord Kelvin has said, have been the reward of accurate measurement and patient labour in the minute sifting of numerical results. And this also is true, that far more of what is useful in helping to shape the affairs of the country is to be learned from the records of measurement we call statistics than from the most brilliant speculation.

Our foreign trade, exclusive of coin and bullion, of goods not the produce of Canada, and exports estimated short, has grown from $336,018,000 in the last fiscal year of the nineteenth century to $518,800,000 in the sixth year of the twentieth. It was $123,000,000 in 1870 and $162,874,000 in 1876. Thirty years ago, at the end of a period of six years, our trade showed a gain of $39,391,000 and at the end of our last period of six years it shows a gain of $182,748,000.

Our chartered banks, which in 1870 had assets of $103,200,000 and in 1876 of $183,500,000, had assets of $459,700,000 in 1900, and of $878,500,000 in 1906, being a gain in the former period of $80,300,000 and in the latter of $418,800,000. In 1870 the total cash on deposit in the banks was $48,763,000 and $72,853,000 in 1876; and after thirty years the amount was $305,140,000 in 1900 and $605,968,000 in 1906. In the first period of six years the gain was $24,090,000 and in the last it was $300,828,000. The monthly average reserve fund held by the banks was $32,372,000 at the end of 1900 and $64,000,000 at the end of 1906, and in the same period their paid-up capital was increased by $25,881,000. The clearing house statements, which are a certain measure of the volume of the country's business, show an expansion of $2,360,000,000 in the six years of this century, the amount being $1,590,000,000 in 1900 and $3,950,000,000 in 1906. There was at the credit of depositors in Post Office and Dominion Government savings banks at the end of June, 1870, a sum of $3,411,000, which grew to $7,044,000 in 1876, to $53,150,000 in 1900 and to $61,911,000 in 1906. Altogether there was at the credit of depositors in chartered and savings banks in 1906 a sum of $667,880,000, whereof the large amount of $309,590,000 has been an accumulation of this century. In the chartered banks alone the increase of deposits from $48,763,000 in 1870 to $305,140,000 in 1900 and to $605,968,000 in 1906 shows the very large extent to which the banks have been assisted above their own capital in maintaining the business of the country.

Our steam railways in operation in the Dominion in 1870 had a length of 2,617 miles and in 1876 of 5,218 miles. At the end of the century they had a length of 17,657 and in 1906 of 21,353 miles, together with 814 miles of electric railways. The earliest statistics of railway operations go back to 1875, and in the following table a few comparative figures are given to show the progress of the Dominion in this great branch of transportation:

Comparative Statistics of Railway Transportation.

Steam Railways	1876.	1900.	1906.
Train mileage ... m.	18,103,628	52,647,684	72,723,482
Passengers ..... no.	5,544,814	17,122,193	27,989,782
Freight ..... ton.	6,331,757	35,764,970	57,966,713
Gross earnings ... $	19,358,085	70,231,979	125,322,865
Net earnings .... "	3,555,364	22,826,383	38,193,431

The increase of train mileage in the six years of the twentieth century is 20,000,000, of passengers 10,867,000, of freight 22,200,000 tons, of gross earnings $55,000,000, and of net earnings $15,367,000, as against an increase of 34,544,000 train mileage, of 11,577,000 passengers, of 29,433,000 freight tons, of $50,874,000 gross earnings and $19,271,000 net earnings in the twenty-four years of the nineteenth century. The statistics of electric railways are complete only for the six years of this century, in which they show an increase of 116,720,000 passengers carried and of $2,137,000 net earnings, being for each in a period of five years an increase of 100 per cent. The subscribed capital of steam railways in 1876 was $317,795,468 and the paid-up capital $290,757,875. In 1900 the subscribed capital of steam and electric railways was $1,040,486,378, and the paid-up capital $998,264,405; and in 1906 the subscribed was $1,456,176,443, and the paid-up $1,396,356,675.

Trade, transportation and banking have been the most active and potent of all agencies in the development of our country. Without international trade we should exist as a hermit nation; without railways the opening up of our great interior between ocean and ocean could not be achieved; and without banks there would be little business beyond a simple exchange between neighbor and neighbor. The figures given show how Canada is advancing on the highways of the nations.

Western Development.

Illustrations of another sort are found in the records of the census of our North-West provinces, taken a year ago.

Manitoba, Saskatchewan and Alberta were an unknown and untravelled region less than forty years ago. Manitoba was admitted to the status of a province of the Confederation in 1870, and Saskatchewan and Alberta attained to the same rank only in 1905. In 1881, when the first census of those three areas was taken, they had a population of 105,681; in 1891 they had 219,305; and in 1901 they had 419,512. In 1906, five years later, the population was 808,863. Manitoba's share in this growth was 110,477, Saskatchewan's was 166,484, and

*Address delivered at the Toronto Convention Canadian Manufacturers' Association.

Alberta's was 112,390, and the rate of increase for the three provinces in the five years was 93 per cent. There were 2,370 townships with inhabitants in 1901 and 4,365 in 1906, and the cities, towns and incorporated villages grew in the same period from 84 to 185.

The number of farms in the three provinces in 1906 was 122,398, being 67,773 more than in 1901. In Manitoba there were 36,141, an increase of 4,329; in Saskatchewan, 55,971, an increase of 42,591; and in Alberta, 30,286, an increase of 20,853.

The whole number of horses in 1906 was 682,919, being an increase in five years of 342,590; of milch cows, 384,006, an increase of 59,790; of other horned cattle, 1,560,592, an increase of 802,183; of sheep and lambs 304,531, an increase of 121,915; and of swine 439,048, an increase of 238,673.

The area sown to wheat, oats, barley, rye, flax, potatoes, other field roots, forage crops and cultivated hay in 1900 was 3,597,700 acres, in 1905 it was 6,298,000 acres, and in 1906 it was 8,328,000 acres. In the first of these years crops were light, owing to an unusual season of drouth; but in the other two years, when the conditions were normal, the yield of wheat was 82,462,000 bushels in 1905, and 110,587,000 in 1906, of oats, 68,811,000 bushels in 1905 and 110,570,000 in 1906, and of barley, 10,972,000 bushels in 1905 and 18,685,000 in 1906. The increase in the areas of those field crops in the five years 1900 to 1905 was 2,700,000 acres, and in the six years 1900 to 1906 it was 4,730,300 acres.

Comparing the areas of all field crops in 1905 and 1906, there were in the North-West provinces 6,338,000 acres in the former, and 8,408,000 in the latter year, being an increase of 2,070,000 acres or nearly 33 per cent. in one year. In Manitoba the increase was 603,000 acres, in Saskatchewan, 1,167,000 and in Alberta 300,000, which in the aggregate is equal in extent to ninety townships. Yet the whole area in crops in the three provinces last year was only 28 per cent. of the land occupied as farms and only 7 per cent. of the surveyed land in the provinces—the land occupied as farms and ranches being 30,502,927 acres and the land surveyed for settlement 120,484,455 acres.

The Growth of Manufactures.

A census of manufactures taken last year for the year 1905 supplies illustrations of the growth of the Dominion in the twentieth century which may be to this Convention more interesting and appropriate than any one of the others.

In the collection of the returns of manufactures our work has been largely facilitated by the good-will and the kindly co-operation of the officers and members of this Association; and the fact that full reports have been gathered from every part of the Dominion through the medium of the Post Office, without resort to legal authority except in one instance, deserves acknowledgment and hearty recognition. If any works have been missed the fault is ours through failure to make up a full list, which is perhaps excusable in a country of such wide extent as Canada.

A comparison of works employing five hands and over in 1905 with those of 1900 cannot be accurately made for numbers, partly because in the interval many works have been merged under one management, such as butter and cheese factories and canning works; partly because in large establishments carrying on several kinds of industries one return has been made in 1906 where in 1901 separate returns were made for each kind; and partly also because owners of shops in receipt of stated salaries or allowances from the business who were counted in 1901 have not been so counted in 1906. Consequently in hundreds of cases in the census of the latter year such shops are put into a class of four employees and under. For these reasons the number of works of the first who were counted in 1901 have not been so counted in 1906. In one establishment, for example, eleven kinds of industries are carried on under one management, and the statistics for it are compiled in the tables with the industry of greatest production. An attempt was made in all such cases to procure with the return a statement of the several kinds of products and the value of each product, which would be useful in showing the extensive variety of our manufactures, but many of the returns are defective in these particulars. In the example already referred to, the products for which separate values are given consist of corsets, furs, harness, men's and boys' clothing, photo-engraving, printing, shirts, ties, upholstery, whitewear and women's clothing, all of which are grouped with the class last named because it is one of greatest value, and the total values run up into several millions. Inquiries are often made of us by traders and consumers if particular kinds of articles are made in the country ; and if the information was fully supplied by manufacturers it would possess not a practical use only, but an economic importance in exhibiting the extent and range of the country's industries.

The reasons already given account for the apparent decrease in the number of establishments employing five hands and over ; but it may be added that in the 27 principal classes of industries showing a decrease in the number of works—a decrease numbering more than 3,000—there is an increase of $40,000,000 in the value of products. Flouring mills and electric light plants, like butter and cheese factories, brick and tile works and lime-kilns, have been classed with establishments employing five hands and over on account of their relatively large production.

The principal industries employing less than five hands are those of baking, blacksmithing, carding, dress-making, tailoring, printing and harness-making. These comprise 3,249 shops or works with 8,610 employees, and the value of their products is $11,906,025.

Taking the two classes of establishments, viz.: those employing five persons and over and those employing less than five—the whole number in the Dominion whose statistics have been compiled for the calendar year 1905 is 15,796. The capital employed in these works, including land, buildings, plant and working capital, is $846,585,000. The employees on salaries and wages with earnings and average earnings are as in the following table:—

Employees and Earnings, 1905.

Sex	No.	$	Averages. $
On salaries—			
Male	31,545	28,938,637	917 38
Female	4,951	1,785,449	360 62
On wages—			
Male	288,033	119,550,821	415 05
Female	68,001	14,825,104	218 01

The number of employees on salaries and wages is 392,530 and their total earnings is $165,100,011, and the total value of products is $718,352,603. But to make a fair comparison of 1900 and 1905 the statistics of works employing five persons and over will be used here.

The following table shows the growth of the Dominion in five years for manufacturing establishments employing five persons and over under the heads of capital, employees, earnings and value of products:—

Capital, Employees, Earnings and Products.

Schedule		1905	1900	Increase
Capital	$	833,916,155	446,916,487	386,999,668
Employees	no.	383,920	339,173*	44,747
Salaries and wages	$	162,175,578	113,249,350	48,926,228
Value of products..	"	706,446,578	481,053,375	225,393,203

In the five years of this century capital has increased in the ratio of 100 to 187 and the value of products in the ratio of 100 to 147, which indicates that in some industries and works production has not reached a full measure of development. The average ratio of capital to production for all industries in 1900 was 100 to 108, and in 1905 it was 100 to 85. The cause of this change is revealed in the returns of some of the recently organized works. The capital invested in electric light and power plants, for example, increased during the five years by $68,500,000, and its ratio to production is 100 to 9.44. So also with smelting works like those in Nova Scotia, Ontario and British Columbia, whose capital has been increased by nearly $76,000,000, the ratio of capital to production is 100 to 32.50. It is obvious from the number of persons employed in some of these works that they have not been working to full capacity. But industries which show in the aggregate an increase of $49,000,000 in salaries and wages and of $225,000,000 in production in the fifth year of the twentieth century are setting a good pace for the century.

Compared by groups of industries for 1900 and 1905, the values of products in each year and the increase in five years are shown in the next table:—

Production by Groups of Industries.

Groups of Industries	1905	1900	Increase
	$	$	$
Food products	172,017,002	125,202,620	46,814,382
Textiles	84,370,099	67,724,839	16,645,260
Iron and steel products.	52,587,051	34,878,402	17,708,649
Timber and lumber and their re-manufactures.	109,500,970	80,341,204	29,159,766
Leather and its finished products	41,201,872	34,720,513	6,481,359
Paper and printing	32,773,880	20,653,028	12,120,852
Liquors and beverages	13,928,701	9,191,700	4,737,001
Chemicals and allied products	15,290,822	11,437,300	3,853,522
Clay, glass and stone products	13,558,921	7,318,582	6,240,339
Metals and metal products other than steel	50,068,669	19,561,261	30,507,408
Tobacco & its Manufactures	15,189,720	11,802,112	3,387,608
Cars, carriages, wagons, etc.	36,911,124	19,971,605	16,939,519
Vessels for water transportation	1,892,253	2,043,668	151,415
Hand trades	1,433,753	599,329	834,424
Miscellaneous industries	65,721,741	35,607,212	30,114,529
Totals	706,446,578	481,053,375	225,393,203

The large increases have been made in food products, timber and lumber and their re-manufactures, metals and metal products other than iron and steel, iron and steel products, textiles, cars, carriages, wagons, etc., and paper and printing, ranging in these several groups from $12,000,000 to $47,000,000 of increase.

Comparing the principal manufacturing establishments by value of products there were 479 works in 1905 with products of $200,000, to under $500,000 each, against 323 in 1900 of the same class; there were 139 in 1905 with products of $500,000 to under $1,000,000 each, against 68 in 1900 of this class; and there were 81 in 1905 with products of $1,000,000 and over against 39 in 1900 of this class. And as showing growth in industrial efficiency, which implies improved methods and machinery and harder work, it can be said that in every group of our industries the average of production has increased substantially in five years. In 1900 it was for all industries $1,559, and in 1905 it was $1,990 per wage worker; or compared on the basis of all employees on salaries and wages, it was $1,476 in 1900 and $1,803 in 1905.

Another comparison may be made here, viz.: the cost for management and labor in manufacturing establishments. In 1900 the average salary of managers, officers, clerks, etc., was $833 for males and $317 for females, and in 1905 it was $925 for males and $362 for females. For wage-earners employed in the works the average in 1900 was $334 for males and $176 for females,, and in 1905 it was $417 for males and $219 for females. But for both sexes the average cost of salary per employee was $771 in 1900 and $849 in 1905, an increase of $78; while the cost of wages was $286 in 1900 and $379 in 1905, an increase of $93 per employee. The capital employed in manufacturing establishments, including land, buildings, plant and working capital is shown by the following table for the provinces of the Dominion, together with the increase of capital in each province at the end of the fifth year.

Capital Employed in Manufactures.

Provinces.	1905.	1900.	Increase.
	$	$	$
British Columbia	52,403,379	22,901,892	29,501,487
Manitoba	27,070,665	7,539,691	19,530,974
New Brunswick	26,461,664	20,741,170	5,720,494
Nova Scotia	74,599,738	34,586,416	40,013,322
Ontario	390,875,465	214,972,275	175,903,190
Prince Edward Island	1,553,916	2,081,766	527,850
Quebec	251,730,182	142,403,407	109,326,775
Saskatchewan	3,820,975	1,689,870	7,531,476
Alberta	5,400,371		

In all the provinces except Prince Edward Island there has been increase of capital as measured by the value of land, buildings, plant and working capital; and while the greatest per cent. of increase has been made in the western provinces, the large investments have been made in Ontario and Quebec.

The value of products is shown by provinces in the next table for the two census years, together with the increase in five years.

Products by Provinces, 1900 and 1905.

Provinces.	1905.	1900.	Increase.
	$	$	$
British Columbia	37,796,740	19,447,778	18,348,962
Manitoba	27,857,396	12,927,439	14,929,957
New Brunswick	21,833,564	20,972,470	861,094
Nova Scotia	31,987,449	23,592,513	8,394,936
Ontario	361,372,741	241,533,486	119,839,255
Prince Edward Island	1,696,459	2,326,708	630,249
Quebec	216,478,496	158,287,994	58,190,502
Saskatchewan	2,433,801	1,964,987	5,458,746
Alberta	4,979,932		

*An excess error of 4,862 employees crept into the tables of the 1901 census, which is corrected here. It was made in the return of one establishment of men's factory clothing in Centre Toronto and was overlooked in the compilation.

British Columbia manufacturers nearly doubled the value of their products in the five years, Manitoba manufacturers doubled theirs, and Saskatchewan and Alberta nearly quadrupled theirs. The value of preserved fish in British Columbia was increased by $1,492,000, of log products by $6,960,000 and of smelting works by $5,542,000. In Manitoba the chief increase has been in the products of flour and grist mills, which exceed $3,000,000, and in Saskatchewan and Alberta the values of log products and flour and grist mill products have increased by $2,452,000. Nova Scotia shows an increase of $711,000 in log products and of more than $5,500,000 in the products of smelting works. For Ontario and Quebec value and increase are given in the following table for industries in which the increase in the five years is $2,000,000 and over:

Products of Principal Industries in Ontario and Quebec.

Industries.	1905	1900.	Increase.
Ontario.	$	$	$
Agricultural implements...	11,926,233	8,295,170	3,631,063
Bread, biscuits and confectionery	9,981,136	6,102,430	3,878,706
Clothing, women's, factory.	7,144,892	1,309,627	5,835,265
Electrical apparatus and supplies	7,201,463	1,171,543	6,029,920
Flour and grist mill products	35,319,060	21,025,481	14,293,579
Foundry products	15,520,418	9,145,382	6,375,036
Furniture	7,375,528	5,212,997	2,162,531
Leather	9,572,334	6,255,337	3,316,997
Log products	31,626,222	25,672,424	5,953,798
Lumber products	12,882,223	6,152,853	6,729,370
Plumbing and tinsmithing	5,644,716	2,613,814	3,030,902
Printing and publishing ..	11,429,664	7,077,800	4,351,864
Smelting (ore products)...	11,870,183	1,894,012	9,976,171
Quebec.			
Car works and repairs....	13,225,317	5,905,805	7,319,512
Electric light and power..	4,188,760	646,563	3,542,197
Flour & grist mill products	8,598,830	3,195,911	5,402,919
Iron & steel products	5,510,596	3,455,578	2,055,018
Log products	14,489,206	10,391,638	4,097,568
Paper	6,163,240	2,621,071	3,542,169
Slaughtering & meat packing	5,351,739	3,079,440	2,272,299
Tobacco products	10,891,803	8,230,952	2,660,851
Wire	3,437,308	1,213,239	2,224,069

In Ontario the greatest increase is shown to be in flour and grist mill products, and in Quebec it is in car works and car repairs. Seven of the thirteen industries for Ontario and three of the nine for Quebec have values of $10,000,000 and over.

The next comparison is made for the value of products of cities and towns in the five years in which the increase is $2,000,000 and over. The places are arranged in alphabetical order.

Products of Cities and Towns, Showing Increase of $2,000,000 and Over.

Cities and Towns.	1905.	1900.	Increase.
	$	$	$
Amherst	4,174,929	1,551,907	2,623,022
Berlin	5,449,012	3,037,513	2,411,499
Brantford	8,545,679	5,564,695	2,980,984
Hamilton	24,625,776	17,122,346	7,503,430
Kingston	4,329,607	2,045,173	2,284,434
London	12,626,844	8,122,185	4,504,659
Montreal	99,746,772	71,099,750	28,647,022
Ottawa	10,641,378	7,638,688	3,002,690
Peterborough	11,566,805	3,789,164	7,777,641
Sault Ste. Marie ..	5,251,643	738,472	4,513,171
Sydney	4,058,659	631,396	3,427,263
Toronto	85,714,278	58,415,498	27,298,780
Vancouver	10,067,556	4,990,152	5,077,404
Winnipeg	18,983,290	8,616,248	10,367,042

In this list of fourteen cities and towns relative positions have not changed much in the five years as ranked by values of products. Montreal, Toronto, Hamilton, Winnipeg and London continue to hold the first five places in the order named. Peterborough has stepped up from ninth to sixth place and Ottawa has dropped from sixth to seventh. Vancouver retains the eighth rank, and Brantford drops from seventh to ninth. Berlin retains the tenth place. Sault Ste. Marie has displaced Kingston for the eleventh place, and Kingston, Amherst and Sydney are at the foot. But when ranked according to increase in the value of product the order is to some extent changed. Montreal and Toronto are yet in first and second places; but Winnipeg and Peterborough take rank before Hamilton, and Vancouver and Sault Ste. Marie before London. In the fourteen cities and towns the increase in the value of manufactures in the five years is $112,419,041 or 58 per cent. Montreal's increase is 40 per cent. and Toronto's is 47 per cent. Adding to these cities the value of products for works employing less than five hands in 1905, Montreal's total is $100,425,964 and Toronto's is $86,838,101.

The evidences of the growth of Canada in the twentieth century found in the statistics of manufactures, of railways, trade and commerce are for the whole Dominion, and they show a surprising record of expansion. The census of population and agriculture in the North-West provinces shows if possible development on a larger scale, and while it will not be claimed that the older provinces are growing at the same rate there is no doubt that all parts of the country have prospered in their varied industries. The interests of agriculture, transportation, banking, manufactures, trade and all business affairs act and react upon each other, and with its great natural resources in land and forest, minerals, fisheries and water-powers, there is no limit within sight to the greatness to which Canada may attain before the century is out.

The manufacturers and merchants of Toronto and Montreal are busier to-day through their travellers and agents on the prairies of the West than twenty-five years ago they were in the counties of Ontario and Quebec. Thirty-five years ago the Government of this province and the Government of the Dominion began a contention for possession of the unknown tract between the height of land and Hudson Bay, and nearly twenty-five years ago the final award was made confirming the claim of the province. But for half the lifetime of a generation at the close of last century the new possession was kept as a miser keeps his horde, while our surplus population was going out by tens of thousands every year to find homes and take up citizenship in an alien country, and the victory over the Dominion was exploited for its politics at election after election. Then a young man comparatively new to the public life of the province arose and blazed out a new line into the region of business politics, and the result was the discovery and exploration of the clay belt. That was seven years ago, and the population of that wide northern wilderness stretching nine hundred miles from Mattawa town on the Ottawa River to Winnipeg was less than one per square mile. A new transcontinental railway is now under construction through that domain, and though some of us may

not, will not, live to see it, I am sanguine that long before the close of this century the clay belt of Ontario and its continuation into Quebec will sustain a population of two to three millions,—joining together by the strongest of ties the east and the west and serving to maintain Montreal and Toronto as the great industrial and commercial centres of the Dominion.

A Summary.

Our foreign trade, exclusive of coin and bullion, goods not the produce of Canada and exports estimated short, has grown from $336,018,000 in the last fiscal year of the 19th century to $518,800,000 in the sixth year of the 20th. Thirty years ago, at the end of a period of six years, it showed a gain of $39,391,000, and at the end of our last period of six years the gain is $182,748,000. Our chartered banks, which in 1870 had assets of $103,200,000, and in 1876 of $183,500,000, had in 1900 assets of $459,700,000, and in 1906 of $878,500,000, being a gain in the former period of $80,300,000, and the latter of $418,800,000. In 1870 the total cash on deposit in the banks was $48,763,000, and $72,853,000 in 1876; and after thirty years the amount was $305,140,000 in 1900 and $605,968,000 in 1906. In the first period of six years the gain was $24,090,000, and in the last it was $300,828,000. There was at the credit of depositors in chartered and savings banks in 1906 a sum of $667,880,000, whereof the large amount of $309,590,000 has been an accumulation of this century. In the chartered banks alone the increase of deposits from $48,763,000 in 1870 to $305,140,000 in 1900, and to $605,968,000 in 1906 shows the very large extent to which the banks have been assisted above their own capital in maintaining the business of the country. Our steam railways in operation in the Dominion, which had a length of 2,617 miles in 1870 and of 5,218 miles in 1876, had 17,657 miles in 1900 and 21,353 miles in 1906. The increase of train mileage in the six years of the 20th century is 20,000,000 of passengers carried 10,867,000, of freight 22,200,000 tons, of gross earnings $55,000,000, and of net earnings $15,367,000, as against an increase of 34,544,000 train mileage, of 11,577,000 passengers, of 29,433,000 freight tons, of $50,874,000 gross earnings, and of $19,271,000 net earnings in the last twenty-four years ending with 1900 . Electric railways for the six years of this century show an increase of 116,720,000 passengers carried, and of $2,137,000 net earnings, being for each in a period of five years an increase of 100 per cent. The paid-up capital of steam railways in 1876 was $290,757,000, in 1900 it was $998,000,000, and in 1906 it was $1,396,000,000. Trade, transportation and banking have been the most active and potent of all agencies in the development of our country. Without international trade we should exist as a hermit nation; without railways the opening up of our great interior between ocean and ocean could not be achieved; and without banks there would be little business beyond a simple exchange between neighbor and neighbor. The figures given below show how Canada is advancing on the highways of the nations.

Illustrations of another sort showing our growth are found in the records of the census of our North-West provinces, taken a year ago. Manitoba became a province of the Confederation in 1870, and Saskatchewan and Alberta in 1905. In 1881, when the first census of those three areas was taken, they had a population of 105,681; in 1891 they had 219,305; and in 1901 they had 419,512. In 1906, five years later, the population was 808,863, an increase of 93 per cent. There were 2,370 townships with inhabitants in 1901, and 4,365 in 1906 and the cities, towns and incorporated villages grew in the same period from 84 to 185. The number of occupied farms increased from 67,773 in 1901 to 122,398 in 1906. Live stock shows increases in the five years of 342,590 horses, of 59,790 milch cows, of 802,183 other horned cattle, of 121,915 sheep and lambs, and of 238,673 swine. Comparing the areas of all field crops in 1905 and 1906, there were in the three provinces 6,338,000 acres in the former, and 8,408,000 in the latter year, being an increase of 2,070,000 acres or nearly 33 per cent. in one year. Last year's area was more than three times the area of all crops in 1900, yet it was only 28 per cent. of the land occupied as farms and only seven per cent. of the surveyed land in the provinces.

Condensed Statement of Progress of Manufacturing.

A census of manufactures taken last year for the year 1905 supplies illustrations of the growth of the Dominion in the 20th century which may be to the Convention more interesting and appropriate than any one of the others. A comparison of works employing five hands and over in 1905 with those of 1900 cannot be accurately made for numbers, partly because in the interval many works have been merged under one management, such as butter and cheese factories and canning works; partly because in large establishments carrying on several kinds of industries one return has been made in 1906 where in 1901 separate returns were made for each kind; and partly also because owners of shops in receipt of stated salaries or allowances from the business who were counted in 1901 have not been so counted in 1906. Consequently in hundreds of cases in the census of the latter year such shops are put into a class of four employees and under. But it may be added that in the 27 classes of industries showing a decrease in the number of works there is an increase of $40,000,000 in the value of products. Taking all works—those employing five hands and over, and those employing less than five—the number for 1905 was 15,796. The capital employed in those works, including land, buildings, plant and working capital, was $846,585,000, the number of employees on salaries and wages was 392,530, whose total earnings were $165,000,000, and the total value of products was $718,352,000. But to make a fair comparison of 1900 and 1905 the statistics of works employing five persons and over will be used here. The capital employed in these works in 1905 was $834,000,000, an increase of $387,000,000; the number of employees was 383,920, an increase of 44,747; the amount of salaries and wages was $162,175,000, an increase of $48,926,000; and the value of products was $706,446,000, an increase of $225,393,000. In the five years of this century capital has increased in the ratio of 100 to 187, and value of products in the ratio of 100 to 147, which indicates that in some industries and works production has not reached a full measure of development. The average ratio of capital to production for all industries in 1900 was 100 to 108, and in 1905 it was 100 to 85. The cause of this change is revealed in the returns of some of the recently organized works. The capital invested in electric light and power plants, for example, increased during the five years by $68,500,000, and its ratio to production was 100 to 9.44 So also with smelting works like those in Nova Scotia, Ontario and British Columbia, whose capital has been increased by $76,000,000, the ratio to production is 100 to 32.50. But industries which show in the aggregate an increase of $49,000,000 in salaries and wages and of $225,000,000 in production in the fifth year of the twentieth century are setting a good pace for the century. The large increases have been made in food products, timber and lumber and their re-manufactures, metals and metal products other than steel, iron and steel products, textiles, cars, carriages, wagons, etc., and paper and printing, ranging in these several groups from $12,000,000 to $47,000,000 of increase. Comparing the principle manufacturing establishments by values of products, there were 479 works in 1905 with products of $200,000 to under $500,000 each, aganist 323 in 1900 of the same class; there were 139 in 1905 with products of $500,000 to under $1,000,000 each, against 68 in 1900 of this class; and there were 81 in 1905

with products of $1,000,000 and over, against 39 in 1900 of this class. And as showing growth in industrial efficiency, which implies improved methods and machinery and harder work, it can be said that in every group of our industries the average of production has increased substantially in the five years. In 1900 it was for all industries $1,559, and in 1905 it was $1,990 per wage worker; or compared on the basis of all employees on salaries and wages, it was $1,476 in 1900 and $1,803 in 1905. As regards the cost for management and labor, the average salary of managers, officers, clerks, etc., was $833 for males and $317 for females in 1900, and $925 for males, and $362 for females in 1905. For wage-earners employed in the works the average in 1900 was $334 for males and $176 for females, and in 1905 it was $417 for males and $219 for females. But for both sexes the average cost of salary per employee was $771 in 1900 and $849 in 1905, an increase of $78; while the cost of wages was $286 in 1900 and $379 in 1905, an increase of $93 per employee. Capital and products show large increases in the five years for every province of the Dominion except Prince Edward Island, but the large figures are shown for Ontario and Quebec. In Ontario the greatest increase of production is in flour and grist mill products, which is over $14,000,000, and in Quebec it is in car works and repairs, which is over $7,000,000. Seven of thirteen principal industries in Ontario and three of nine in Quebec have values of $10,000,000 and over. In fourteen cities and towns with increases in the values of product of $2,000,000 and over, Montreal stands first with a production of $99,746,000 and an increase of $28,647,000, and Toronto second with a production of $85,714,000 and an increase of $27,300,000. Hamilton is third, with a production of $24,625,000 and an increase of $7,500,000. But Winnipeg, with a production $18,983,000 shows an increase of $10,367,000, and Peterborough with $11,566,000 shows an increase of $7,777,000, and as regards increase each of them exceeds Hamilton at the end of the five years. Vancouver and Sault Ste. Marie also exceed London in the same comparison. In the fourteen cities and towns the increase in the value of manufactures in the five years is $112,419,000 or 58 per cent. Montreal's increase is 40 per cent. and Toronto's is 47 per cent. Adding to these two cities the value of products for works employing less than five hands in 1905, Montreal's total is $100,426,000 and Toronto's is $86,838,000.

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THE COST OF POWER*

By L. G. READ, Consulting Engineer, Montreal



L. G. READ

TO give full consideration to the great question of power—the backbone of all industry—the most vital requisite to material progress—would require time far beyond that which is at my disposal on this occasion. Nor can we view the broader and more interesting subject of the evolution of power—the advent of steam—with its quickening of the world's pulse and its development of its tremendous resources within almost a single generation. We are, therefore, compelled to deal briefly, to deliver, as it were, a little address on a big subject. We must deal directly with the facts as we see them to-day.

On the one hand are the manufacturers, with their almost countless thousands of employees, engaged in the most highly legitimate pursuit conceivable, the conversion of raw material into finished product for the infinite needs of mankind. On the other, the coal supply. Or let it be called by its proper name, the Coal Trust, which, like a gigantic octopus, extends a thirsty tentacle to every manufacturing plant on this continent, and whose fingers are slowly tightening their clutch upon your earning powers. The cost of power as a fixed charge in manufacturing is, therefore, a subject which now knocks at your door and demands admittance.

The cost of power is a subject which has gone so long without expert treatment by the average manufacturer that he has come to look upon his coal bill as an item of expense with which little or nothing can be done, except pay it. I take it for granted that most of you are generating your own power, in your own premises. That some of you are purchasing power from hydro-electric sources. And that all of you are interested in the question—"Can I produce my own power in my own premises at a less cost than it can be purchased for from the outside?"

A manufacturer is in intimate touch with all his other departments. He knows exactly the outlay for advertising and he employs the best of talent in this department. He knows exactly his costs of selling, and in this department he employs the highest ability within his reach. In fact, at the end of the year he knows the exact percentage which his advertising, his selling and his other departments constitute in the total outlay for the year.

But as for power, beyond his coal bill and what he pays his engineer, he does not know and, in my opinion, does not make a proper effort to know the exact cost.

Since nearly every manufacturing plant which produces its own power is equipped with a steam plant, let us take as an illustration a moderate sized, ordinary steam plant and let us assume that it operates on a basis of 10 hours per day for 300 days in the year, and that the average actual power required throughout each day of 10 hours is 200 h.p., and let us take coal at $3.50 per ton.

It is safe to say that the coal bill for one year in such a

*Address delivered at the Toronto Convention Canadian Manufacturers' Association.

plant will be not less than $4,200, that you will pay your engineer $1,000, a fireman $720, and after the incidentals have been added, for oil, packing, waste, etc., the total will amount to $6,200. Then, additions for interest and depreciation will easily bring this amount up to at least $7,000, or, say, $35 per h.p. for the average of 200 h.p.

It is probably safe to say that not one manufacturing plant in fifty is making its own power for so low a cost as $35.

Now, let us see what this $7,000 per year as a fixed charge for power really stands for.

$7,000 represents the net profits on perhaps from $75,000 to $100,000 of finished product.

It represents a fixed charge against your business, equivalent to $140,000 or 5 per cent. bonds, and it is needless to say that you would give much serious thought to the question of the issuance of such an amount of bonds.

It is needless to say that you would analyze all the vital elements in your business before you decided to incur such a burden upon your earnings. And, yet, you pay $7,000 a year for power, without having given anything like a corresponding consideration to the question as to whether or not $7,000 per year for an average of 200 h.p. is the right price. Look only at the coal bill of $4,200. Perhaps most of you do not know that of this $4,200 burned under your boilers, $3,800 are lost, absolutely non-productive; that out of every dollar's worth of coal burned, over 90 cents goes up the chimney and out of the exhaust, without doing any work of any kind.

If you contracted to pay a man a salary of $4,200 per year and should discover that the actual service he gave you was equal to only one hour out of each day, would you consider that good business? Or suppose you owed $25,000 borrowed money and suppose you had to pay 17 per cent. interest on this money, would you consider that good finance. And yet—if yours is the average plant—I assure you that these are exactly the things which are happening in your coal bill.

It then becomes obvious that to get the cost of your power down to a point where the outlay in that department is consistent with the economies demanded in the science of modern manufacturing you must either secure a reduction in the price of coal or you must generate your power on less coal than you are now consuming.

The first alternative is out of the question, at least so far as we can see. To materially reduce the amount of coal required to produce your present horse-power is easily obtainable, if you will give this department the expert treatment which it deserves.

Let us now understand what one h.p. is. You hear on every hand, "So much per annum per horse power." "Cost per horse power hour." What is a horse power hour? If all the power in this little piece of coal could be utilized—if all its latent energy could be converted into actual work, it would lift 1,980,000 lbs. one foot high in one hour, or nearly 1,000 tons of dead weight off the ground for one hour.

It weighs but 2¾ ounces, and yet could lift a weight twelve million times greater than itself.

In other words, it contains the net equivalent of one horse power hour.

But, when you undertake to convert this amount of latent energy into the actual driving of your machinery, I will not say that you must burn, but that you do burn a piece this size (5 lbs.). It seems like a vast distance from this piece to that piece. But we cannot convert all of this latent energy into actual work, because nature demands a premium on what she gives us. On the other hand, however, she does not ask us to pay any such price as this (5 lbs.) for one b. h. p. hour, this 17 per cent. interest.

And since, under modern methods, we know that a brake horse power hour of actual work can be produced for a piece this size (2 lbs.), it certainly becomes apparent that in the average plant there is being burned unnecessarily and without return the difference between 2 and 5 lbs., or 60 per cent. more coal than is required by refined engineering of to-day. If 60 per cent. of this $4,200 coal bill can be saved or, say, $2,500 per year, you may then consider that $2,500 per year saved is equivalent to your having retired an obligation of $41,500. Would you not consider a department worthy of expert treatment which unnecessarily places upon your business the equivalent of a $41,500 obligation at 6 per cent.? If you will treat your power as a department and if you will give to that department the attention it deserves, you will easily confirm my claim that modern practice and actual results will place this great economy within your reach.

It would be impracticable, considering the limits of time on this occasion and considering the great variety of local conditions, for me to undertake to detail the actual ways and means by which you may attain these ends; but at least, I may say that—

You must approach this subject of power cost as a fixed charge in your manufacturing with a serious mind.

You must ascertain what your load factor is.

You must know what actual horse power it takes to drive your plant, and when you know this you have got the key which will open the door to an important department in your business, a department which you have hitherto neglected.

To ascertain your load factor a diagram covering your daily run must be made by an expert. This diagram must show the h. p. output from your engines at every hour during the day's run, and, preferably for a number of days in succession, so that you may arrive at your load factor, that is to say, the maximum load and at what hour, the minimum load and at what time and from these two you will obtain the load factor, the average actual h. p. you require.

Then open a power account. Charge into that account that part of your capital invested in engines, boilers, pumps, dynamos, power house, chimneys, foundation, piping, shafting, belting, and every part of your equipment which either generates or transmits power, together with all their accessories. This item will show you how much of your capital you have invested in your power department and upon it you will know what to charge for interest and depreciation. Charge into this account your fuel, engineers' and firemen's salaries, oil, water, repairs, upkeep and all the incidentals which in the average manufacturing plant are lost in other accounts.

Some of you may say "Yes, but all these items come out at the end of the year in some other account. So, what is the difference?"

The difference is simply this: that in order to manage your power department in a way that will insure your getting your power at the right price, you must know all about that department, just as you know and insist upon knowing all about the other departments in your business, and you cannot know all about your power department unless you follow it in this manner. With this load factor known, and with all these items charged into this account, it then becomes merely a matter of dividing the total number of dollars footed up by the average h. p. taken from your power diagram—for one year—and the quotient will be your cost per annum per h. p.

It may not be for me to set down an arbitrary price per annum per h. p. as representing the price at which you would be justified in generating your own power instead of purchasing it from outside sources, but I will assume the responsibility of saying that unless you can purchase from outside sources, after charging interest and depreciation and everything which is properly chargeable to such motor equipment and appliances as may be necessary for you to utilize outside

power—you must not pay any more than $25.00 per annum per h. p., and only upon your average load and not upon your maximum load.

I will, however, place a limit upon your load factor; that is to say, your average h. p. requirement should be at least 60 per cent. of your maximum load. Or, in other words, with a maximum of 100 h. p. and a minimum of 20 h. p., or a load factor of 60 per cent. in your plant, you would contract to pay $1,500 per year and no more. For, obviously, if it can be shown conclusively that you can produce your power on this basis, at this price, why should you pay a higher price than this for it from some outside source? Whatever you may pay to outside sources in excess of this price represents just that much dead loss in your business, and when you consider that a reduction in your fixed charges of even $2.00 per day is equivalent to your going to your bank and paying off $10,000 of outstanding 6 per cent. paper you will realize that the earning power of money, like the latent heat in coal, is fraught with great possibilities, when given the proper treatment.

Now, let us take the point of view of the power company that sells its power as a public utility. Some think that the development of water powers will solve this great problem of power cost. But, if you will look closely, you will find that the limits of these possibilities are soon reached. In the first place, water powers are not always located where we want them, and where we need them. Let us take a hypothetical case. Suppose we develop a water power with a maximum of 100,000 h. p. Our total investment will amount to at least $65 per h. p. initial cost, or, say, $6,500,000.

We contract to deliver power to thousands of users. Our whole equipment is designed and installed, with all our transmission lines, our transforming stations; with all the local equipment required at points of destination; our management and our organization are based upon $6.500,000 actual investment. We will say that our peak load—that is, the top notch of our output each 24 hours—reaches the 100,000 h. p. mark. It is safe to say that the load plot—that is, a diagram showing the horse power output at each hour during the 24—will average not more than 40,000 h. p. In other words, the total amount of power we sell equals a load factor of 40 per cent. Now, 40,000 multiplied by $65.00 per h. p. (initial cost), equals only $2,600,000, and you will see at once that the price which must be charged per annum per h. p. must be an amount sufficiently high so that an average output of 40,000 h. p. (or $2,600,000 of our investment), will earn a return sufficient to carry the entire $6,500,000. And this is the condition which usually prevails when a water power is developed and expanded into a public utility.

On the other hand, if a water power is developed for local use, by an individual concern, obviating the necessity of long transmission losses and the low average h. p. output, you will readily see that, under these conditions, water power serves its best and most practicable purpose.

The ten best water power developments in the world—including the cheap water powers of Canada—show an average cost of $10.00 to $12.00 per annum per h. p. This is cost, not the price at which the power is sold. Suppose, after allowances for transmission, transformer losses, fixed charges and a fair profit, it were delivered to the consumer for $20.00 per h. p. on the usual flat rate basis. You contract to pay for a certain amount of power whether you use it or not. (Say 100 h. p.). At the end of the year you will find that since your own load factor will probably not average over 60 per cent. (for you, as well as the big power company, have your peak load and your minimum load and, consequently, your average horse power requirement), what you have actually gotten equals $33.33 instead of $20.00. Because, $20.00 multiplied by 100 h. p. equals $2,000, and $2,000 divided by your actual average load of 60 h. p. equals $33.33 per h. p., or 65 per cent. more per annum per h. p. than the rate named in your contract.

In other words, you pay the power company $1,200 for power you do get and $800.00 for power you do not get.

The Gas Company—a public utility—charges you for the exact amount of gas you use and no more.

The Water Company—a public utility—does the same.

Now, when a power company elects to expand itself into a public utility, on what theory has it the right to demand this premium of $800.00, this 65 per cent. for something it does not deliver? Is it because "the power is there, if you want it?" Then, so is the gas "there if you want it!" So is the water "there if you want it!"

Is it because of the power company's low per cent. of load factor? Then why have not the Gas Company and the Water Company an equal right to make the consumer pay the difference between their average output and their maximum capacity?

The answer is, that the sale of power, as a public utility, is a new enterprise. The consumer has overlooked the importance of this department, hence the power companies make hay while the sun shines. But there are exceptions: where the average load factor in a plant is equal to and more than the minimum amount of power contracted for; but these exceptions are few, and you will find that a public power company avoids such contracts.

Now, just one final word. The key to this whole question is the load factor, the average actual h. p. required throughout the day's run. Do not confound this with your maximum h. p. requirement. When you talk of "So much per h. p. per annum," I insist that it be based upon the average h. p. and not the maximum rating. And I insist that with a load factor of 60 per cent. it should not cost you—whether you make it yourself or purchase it from the outside—more than $25.00 or, say, 5-10 of a cent per h. p. hour flat.

Make up your minds now that you will make a department of your power; that you will open a power account; that you will study this question, and if you do these things, the small expense involved will come back multiplied ten fold, as profit.

I am indebted to the officers of this Association for the opportunity of even presenting so briefly the principal claims which I think the question of power has to the consideration of manufacturers. Since, however, justice cannot be done to so broad and so important a subject within such time limits, I shall be glad to send to any member of this Association more explicit details by which he may be guided in making a department of his power and the giving to that department the attention which, in this day of refined engineering, is easily within his reach. (Applause).

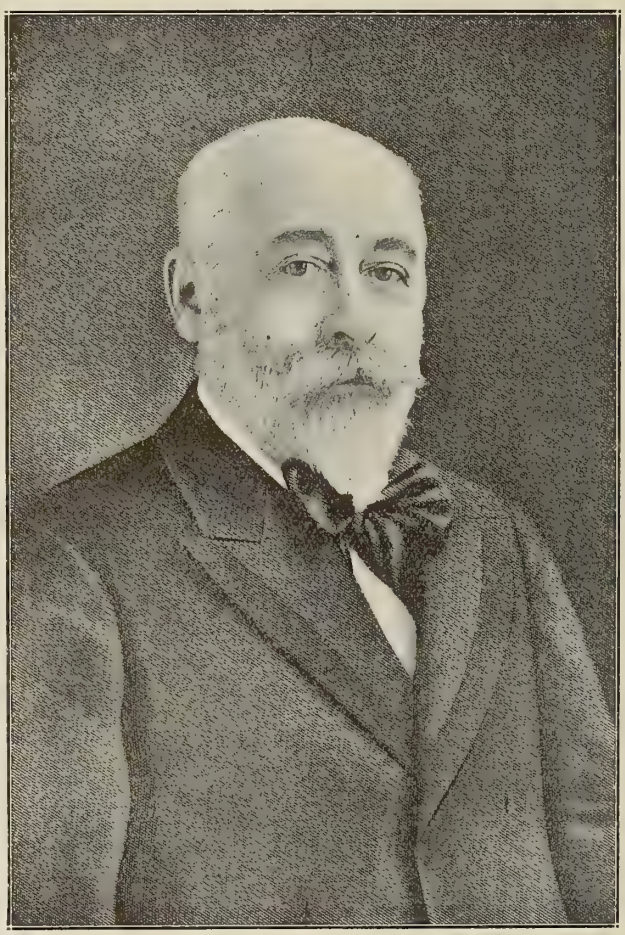
THE CONVENTION

The 36th Annual Meeting of the Canadian Manufacturers' Association, Held in Toronto, September 24th, 25th, 26th, 1907.

IN speaking of the Conventions of the Canadian Manufacturers' Association it is no mere form of words to say that the last is ever the best. It was so two years ago at Quebec, it was so last year at Winnipeg, it was so, unqualifiedly so, this year at Toronto. In the number of registered delegates, in the volume and breadth of work outlined in the Reports of Committees, in the interest taken in the discussions, in the zest with which the entertainments were enjoyed, there never was a gathering in Canada to compare with this. A rare enthusiasm and spirit characterized the whole convention. It was to be seen in the friendly groups that came together in the rotunda, it was evident in the bustle of the registration rooms, it was especially observable in the good attendance and active discussions at the meetings.

The arrangements for the Convention were admirable. When Mr. John Firstbrook, at Winnipeg, extended an invitation to the Association to meet at Toronto this year, he aroused the enthusiasm of those present by the variety and attractiveness of the entertainment which he promised. His promises were exceeded by his acts a hundred fold. Since the decision to make Toronto the Convention City was made, the work of preparation went on without ceasing. How effectively the various committees worked was revealed when the results were produced at the meeting.

In the work of preparation so many were actively engaged that it would be invidious to mention individuals. To every member of the Toronto Branch the Association will feel grateful; first for the excellent arrangements for the comfort of the guests, then for arrangements which made the transaction of so much business possible, and finally for the quality and variety of the entertainment provided.



HON. J. D. ROLLAND (The Rolland Paper Co.)
PRESIDENT, 1907-08

A pleasing feature of the Convention was the number of ladies in the party. For these ample provision was made by those in charge of the entertainments. Of the Reception by the Toronto Branch in the King Edward on Tuesday evening, the tally-ho and automobile trip to the Lambton Club, and the reception there for the ladies on Wednesday afternoon, the Theatre Party to the Royal Alexandra in the evening, the reception by the Lieutenant-Governor and Lady Mortimer Clark on Thursday afternoon, in the beautiful garden of Government House, the Banquet on Thursday night, with the Theatre Party to Shea's for the ladies, and the thoroughly enjoyable trip to Hamilton and Niagara Falls on Friday, mention will be made in the report to follow. Merely an acknowledgment of the courtesies extended is given here. The truest thanks were expressed by the thorough enjoyment of the large number who were present at every function.

Uniform courtesy was extended by the King Edward Hotel management. The comfort of the guests was carefully looked after and ample provision was made for the convention meetings and registration work. The telegraph companies courteously accepted all social messages and transmitted them free during the time of the Convention. The railway companies had a representative viseing certificates. The Clubs extended the privileges of their membership to the visitors.

The Convention was inspiring. The Association will profit by it throughout the coming year. No members could listen to the annual reports and hear of the great work which had been accomplished during the year just past without feeling a pride in the organization to which he belonged. It was a magnificent record of work done and results accomplished.

THE MEETING.

The President, Mr. Harry Cockshutt, opened the Convention in the words following:

Gentlemen, if you will come to order we will commence the business of the day. I wish to express to you how much pleasure it gives me to welcome you to the thirty-sixth convention of the Canadian Manufacturers' Association. It will be my pleasure to address you somewhat later on in the day, and consequently it is not necessary for me to make any lengthy remarks now. All I wish to say is that the Committee's reports, which are to be presented to you, are, I think, complete and tell you of the work the Association has been carrying on during the past year. I shall now call upon the Secretary to read the minutes of the last Annual Meeting, unless it is your pleasure that they be taken as read.

(By consent of the members present the minutes were taken as read).

The President,—We will now proceed with the reports of the officers. I shall first ask the Secretary to read his report.

REPORT OF THE SECRETARY.

Mr. G. M. Murray presented and read his report as Secretary as follows:

To the President and Members of the Canadian Manufacturers' Association.

It is indeed a pleasure for your Secretary to commence the proceedings of this important Convention by submitting

as it were a bird's eye view of the field of operations in which the Association has been engaged during the year just closed.

Progress and expansion have so long been your watchwords that it is perhaps trite to remark that the year has been an exceptionally busy one, yet measured by the accomplishments of previous years it truly seems to have established a new record, both as regards the activity of committees, branches and sections, and the results thereby achieved.

Your Executive Council has held eleven meetings with an average attendance of thirty-seven, the largest it has ever been. As evidence of the interest taken in these meetings it is worthy of note that the attendance of members from outside points has averaged eighteen. The number of your standing committees has been increased by two, one for Technical Education, and one for the London Office, a fact which is responsible for the Committee meetings being more numerous than ever before, 93 for 1906-07, as against 79 for 1905-06. In addition to the above, there were twenty-five section and fifteen branch meetings at the Head Office, besides nearly fifty meetings of various kinds at the different branch offices, all combining to make the year one of exceptional activity.

But meetings in themselves would mean little if they were not followed by results, and it is therefore gratifying to be able to state that the benefits to the membership at large have been commensurate with this increased activity. Among the number of such benefits it is possible to mention only a few. An office has been opened in London, England, for the purpose of supplying members with the skilled help they are unable to obtain in Canada, and more than four hundred and fifty workmen have been brought out to date. The Insurance department, after long study and experimentation, has undertaken the examination of policies and the inspection of risks on a contract system that not only promises to make the Department self-sustaining, but ensures for it a wide sphere of usefulness. Under its direction the organization of two mutual fire insurance companies has been carried through to a successful conclusion. The Transportation Department, after three years' of constant effort, has at length obtained an order from the Board of Railway Commissioners compelling the railways to do away with the discrimination against Canadian shippers at frontier points, and to materially reduce their rates in all territory east of Port Arthur. It has also obtained an order for the issuance of a new Freight Classification, from which the objectionable features of the "Owners' Risk" Clause will be largely eliminated. At Ottawa the eight hour day bill was so vigorously opposed that it had to be withdrawn to save it from ignominious defeat. At Toronto and at Quebec Branch Committees were almost equally successful in blocking provincial legislation of a hostile character. Substantial progress has been made in creating a strong public sentiment favorable to the establishment of technical schools. Foreign buyers to the number of 445 have been introduced to Canadian exporters, and profitable transactions have followed in many instances, while the distribution of another edition of the Trade Index has advertised Canadian manufacturers in every quarter of the globe.

A score of other practical results might be mentioned, but I shall refrain from further anticipating what is fully set forth in the reports that are before you. Some of these results have a monetary value that can readily be reckoned in dollars and cents; others are of such a nature that their full value can never be estimated. All of them may reasonably be regarded as dividends upon investment, payable daily at rates which are ever on the increase.

As regards material prosperity, the Association was never in a stronger position than it is to-day. Its balance of cash and liquid assets on July 31st was almost three times as large as at the close of any previous year. INDUSTRIAL CANADA, which two years ago showed a deficit of over $1,200, now rejoices in a surplus of $2,800. Notwithstanding the increase of fees for Class B membership, we have made a net gain for the year of eighty-five names. The average fee payable per member has also made a satisfactory advance from $12.27 in 1905-06, to $12.92 in 1906-07. This fact is worthy of particular note, as it is to our membership fees that we must look as the only source of permanent revenue. Not only, therefore, is the number of subscriptions steadily increasing, but there is a marked tendency for the $10 member to climb into the $15 class, and for the $15 member to climb into the $25 class. Such a condition enables us to look forward to the future with renewed confidence in our ability to finance our way through the various operations which we have mapped out for ourselves.



G. M. MURRAY
General Secretary

In January last the Association moved into new and larger offices in the Traders' Bank Building. It had long since outgrown its narrow quarters in the Board of Trade and latterly it was only with the greatest difficulty that the immense volume of work incident to such an extensive organization could be satisfactorily performed. Ample accommodation is now provided for present needs, and what is perhaps of even greater significance, the Association is housed in a manner befitting its dignity and importance. A cordial invitation is extended to members to visit the new offices. A hearty welcome awaits them and an obliging staff will always be found in readiness to serve their interests.

It has been the Association's misfortune to lose two of its most valued officers since the last Annual Meeting, Mr. Stewart, the General Secretary, and Mr. Marlow, the Manager of the Transportation Department. The vacancies, caused by their resignations, were filled by the appointment of Mr. Walsh and Mr. Scully. Consequent upon the decision to be represented in Ottawa and in London two other additions have been made, while still further additions will be necessary if the

Convention authorizes the establishment of a department for the collection of overdue accounts, as proposed by the Commercial Intelligence Committee. Changes and additions are usually attended by a certain amount of disorganization, but I am pleased to report that owing to the care with which your committee selected its new officers, the work has been conducted with the same regularity as heretofore.

The entire working force at present numbers twenty-three employees, of whom sixteen devote their whole time to the service of the Association. All have applied themselves throughout the year to the discharge of their respective duties with a zeal and energy which it has been a pleasure for me to witness. They have had no union except the common bond of devotion to your interests. They have placed no restriction upon their output, nor have they demanded an eight hour day. On the contrary, they have always been glad to work overtime without extra pay, when by so doing they could contribute in however small a degree to the welfare of the manufacturing industries of Canada.

In accordance with instructions received from the Winnipeg Convention, it has been my privilege during the year to visit in company with the President all the Branches of the Association except the one in Vancouver. We have both endeavored on these occasions to meet as many of the members as possible, to explain to them the nature of the work we were carrying on, and to quicken their interest in their organization. While my best efforts in this direction have necessarily been feeble, I do not hesitate to express my belief that some good has been accomplished, and I would recommend, therefore, that for the coming year the experiment be repeated.

In concluding my report, I wish to take advantage of this opportunity to express my grateful appreciation of the honor you have done me in entrusting the work of your important organization to my hands. While I have been nearly four years in your service, I feel that the time has been all too short, and the experience all too limited, to fit me for the onerous duties attached to my office. For the shortcomings which I know have been frequently apparent, I crave your kind indulgence. Especially do I feel the need for doing so when I recall the men whom I have had to succeed. In Mr. Russell, Mr. Young, and Mr. Stewart, the Association has had Secretaries of exceptional ability, and to follow them I am aware that I am but courting comparison by which I can only suffer. It is a pleasure for me, however, to acknowledge the support I have received not only from the members of the Executive Council and the various standing committees, but from private members everywhere. It is to their assistance and the assistance of a loyal staff that I am indebted for such results as I have been able to accomplish. My earnest hope is that for the coming year this assistance will be continued, for it is only with the fullest and freest co-operation that the best interests of the Association will be served.

Respectfully submitted,

G. M. MURRAY, *Secretary.*

The President.—Gentlemen, is it your pleasure that the report of the Secretary be received?

(Voices: Carried).

The President.—In connection with the visiting of the different branches, the Secretary reports that he was not at Vancouver. I might say that I had the opportunity of being at Vancouver and visiting the branch there last year after the Winnipeg Convention.

The President called upon the Treasurer to present his report.

REPORT OF THE TREASURER.

Mr. George Booth presented and read his report as Treasurer as follows:

I herewith submit the financial statement of the Association for the year ending July 31st, 1907, a copy of which you have in your hands, and it has doubtless been read with interest and, I trust, with approval and satisfaction.

Revenue Account for Twelve Months. Ending 31st July, 1907.

1907.				
July 31st	To Expense (as per Schedule "A"	$18,375 77		
	" Insurance Dept. (as per Schedule "C"	2,575 42		
	" Legal Expenses	1,803 25		
	" Annual Meeting	595 05		
	" British Office	627 30		
	" Bad Debts	288 83		
	" Furniture and Fixtures	815 95		
July 31st	To Receptions	68 00		
	" Taxes	11 18		
	" Woollen Section	10 00		
	" Threshing Machinery Sec.	6 27		
	" Cement Section	5 00		
	" Engine & Boiler Section	8 66		
	" Toronto Branch Dinners	73 40		
	By Membership Fees		$27,468 31	
	" Commercial Reports		24 21	
	" Western Excursion, '06		994 71	
	" Interest		490 35	
	" Industrial Canada (as per Schedule "B"		3,753 89	
	" Great Britain Excursion		74 35	
	" Trade Index, '06		1,130 36	
	" Translations		2 66	
	" Jewellery Section		36 60	
	To Balance	8,711 36		
		$33,975 44	$33,975 44	

Cash Account—31st July, 1906, to 31st July, 1907.

Receipts.

Balance 31st July, 1906		$5,682 45
Membership Fees	$26,500 00	
Industrial Canada	12,914 04	
Insurance Department	2,887 04	
Interest	434 13	
Toronto Dinners	106 50	
Trade Index, 1906	7,341 35	
Western Excursion, 1906	1,039 53	
Annual Meeting, 1906	149 45	
Receptions	27 00	
New Zealand Exhibition	243 84	
Dept. Trade and Commerce	21 97	
H. D. Scully	420 00	
Electros	19 40	
Translations and Reports	88 73	
Penfold's Australian Wine	27 57	
Great Britain Excursion	74 35	
Threshing Machine Section	80 00	
Jewellery Section	69 45	
Furniture Section	230 00	
British Office	116 75	
Rent Board Room	5 00	
Sundries	28 58	
Furniture and Fittings	73 19	
		$52,897 87
		$58,580 32

Cash Expenditures.

Industrial Canada	$9,565 90	
Expense	19,039 86	
Insurance Department	5,264 18	
Trade Index, 1906	3,007 12	
Western Excursion, 1906	44 82	
Annual Meeting	733 85	
Toronto Dinners	208 15	
Membership Fees Refunded	15 00	
Legal Expenses	1,803 25	
Commercial Reports and Translations	41 25	
Furniture and Fittings	1,597 92	
Receptions	95 00	
Electros	15 56	
British Office	1,252 27	
Jewellery Section	32 85	
Furniture "	7 25	
Threshing Machine Section	106 27	
Engine and Boiler "	6 31	
Woollen "	10 00	
Cement "	5 00	
Toronto General Trusts	5,000 00	
H. D. Scully	419 50	
Sundries	10 63	
		$48,281 94
Cash on Hand, July 31st, 1907		$10,298 38
		$58,580 32

SCHEDULE "A."

Expense Account.

Express	$ 32 30
Postage	1,099 71
Printing and Stationery	1,133 59
Rent and Light	749 03
Salaries	4,611 27
Telegrams and Telephones	200 21
Travelling Expenses	766 06
Exchange	180 88
Commissions	41 50
Certificates	147 25
Transportation Department	3,852 84
Toronto Branch	1,278 75
Montreal "	2,721 36
British Columbia Branch	243 02
Nova Scotia "	286 36
Quebec "	208 76
Manitoba "	373 13
Sundries	449 75
	$18,375 77

SCHEDULE "B."

STATEMENT SHOWING INCOME AND EXPENDITURE OF INDUSTRIAL CANADA FOR PAST TWELVE MONTHS.

Expenditure.

Printing Paper, etc.	$4,800 37	
Salaries	2,943 31	
Postage and Distribution	716 40	
Electros	254 76	
Travelling Expenses	297 10	
Telegrams and Telephones	52 07	
Special Literary Matter	185 00	
Sundries	19 75	
Rent and Light	316 65	

Income.

Advertising—Display	$11,664 01	
" —Cards	1,642 68	
Copies—Sale of	32 61	$13,339 30
Profit for Twelve Months	$ 3,753 89	
	$13,339 30	$13,339 30

SCHEDULE "C."

SHOWING INCOME AND EXPENDITURE OF INSURANCE DEPARTMENT FOR PAST TWELVE MONTHS.

Expenditure.

Salaries	$3,203 08	
Travelling Expenses	1,167 07	
Printing and Stationery	461 61	
Rent and Light	316 70	
Postage, Telegrams and Telephones	236 52	
Sundries	100 30	

Income.

Fees, etc.—Received	$2,340 61	
" —Accrued	569 25	
		$2,909 86
Deficit for Twelve Months		$2,575 42
	$5,485 28	$5,485 28

BALANCE SHEET.

LIABILITIES.

Fees paid in advance and unearned		$6,142 91
Accounts Payable.		
Account—Industrial Canada	7 49	
Expense	14 80	
Translations	2 36	
British Office	145 83	
Insurance Department	12 54	
Commercial Reports	10 12	
Furniture and Fittings	9 25	
		202 39
Furniture Section		312 98
Balance Surplus Assets		16,111 42
		$22,769 70

ASSETS.

Fees Owing—Accrued Due		$486 71
Furniture and Fittings		3,272 61
Advertisements Accrued, Due and Owing on 31st July, 1907	3,431 48	
Accounts Due Insurance Department	569 25	
Accounts Due British Office	645 20	
Accounts Owing account Translations	9 85	
	$4,655 78	
Less Reserve for Bad and Doubtful Debts	1,000 00	
		$3,655 78
Interest Accrued		56 22
Investment Account—Toronto General Trusts		5,000 00
Cash on hand		163 45
Cash at Bank, as per Bank Book	11,079 62	
Less Outstanding Cheques	944 69	
		$10,134 93
		$22,769 70

CONTINGENT ASSETS.

Liabilities assumed by the Mutual Fire Companies on expenses incurred in Insurance Department.

I certify that this Balance Sheet is a correct statement of the affairs of the Association; that I have duly audited the books and accounts of the Association, and that all my requirements as auditor have been compiled with.

WILTON C. EDDIS, F.C.A., *Auditor.*

The first item that I wish to call your attention to is the surplus of $16,111.42, which represents an increase over that of last year of $8,711, 36. This increase is accounted for by $3,753.89 as profit earned by INDUSTRIAL CANADA during the year; $1,130.36 from the Trade Index; $994.71 surplus from the Western excursion; $2,204.23, excess of receipts from members' fees over amount disbursed for expenses; $490.35 interest on deposits, and $137.82 from sundry other sources.

During the year we have advanced to the Insurance Department $2,575.42, which, added to $2,481.43 previously advanced, makes a total of $5,056.85. This is a contingent account, the liability for which, I am informed, is being assumed by the Mutual Insurance Companies. When paid, our surplus will be increased by the above amount. I presume the Association approves of continuing the same course towards this department that has been pursued hitherto.

The sum of $822.26 has been advanced for the month of August.

Total receipts from all sources for the year amount to $52,894.87, an excess of $12,513.36 over the previous year.



GEORGE BOOTH
(The Booth Copper Company)
Treasurer

be credited to last year and debited to this, making $6,896.30 to be deducted from $12,513.36, leaving $5,617.06 as the excess of receipts over the previous year.

This comparison is hardly fair, as last year we disbursed on Trade Index account $3,448.15, which amount being due on last years disbursements, should, for the sake of comparison,

In examining the statement of assets, I call your attention to the item $3,272,61 for furniture and fittings. Last year the value of the furniture and fittings was $2,554,58, and if we add to this $1,597.92, the amount expended during the year mostly for the fitting up of our new offices, we have $4,152.50, which means a depreciation of furniture and fittings of $879.89.

Having disposed of some of our old furniture, etc., at a considerable loss, and some of it being deteriorated in value by long use or damaged in removal, it was thought the right course to pursue in order to obtain the proper value of this portion of our assets was to have a true and correct inventory taken. This was done with the above results.

The accounts due, $4,655.78, are safely guarded against loss by a reserve of $1,000.00, leaving this item, $3,655.78. It was thought judicious by your Finance Committee, and approved of by the Executive, that $5,000.00 be deposited with the Toronto General Trust at 4 per cent. interest. These two items, with fees owing, $486.71, and $56.22 interest accrued, together with cash on hand and in the bank, $10,298.38, comprises our assets, which amount to $22,769.70.

The liabilities other than that for members fees paid in advance and unearned, are quite small, the total amount being only $515.37. The larger amount of $6,142.91 for members' fees, while unearned, was not collected before they were due, as all fees are due in advance.

The British office has been established in London on a satisfactory financial basis, and with every prospect of success, and it is thought that eventually it may be self-sustaining, but for the present it is a small charge upon the Association.

As in previous years, your Finance Committee have considered the receipts from members' fees the one permanent source of revenue, and their endeavor has been to keep the fixed annual charges on the Association within the amount received therefrom.

Owing to the sum credited to revenue for the year being $4,635.00 in excess of any previous year, which is $1,778.00 in excess of our estimate, your Committee were enabled to pay all charges and expenses from this revenue, and have a balance on hand of $2,204.23.

The increase in our receipts is largely accounted for by the payment of $25.00 each from seventy-one members, and one hundred and one members each paying $15.00, all of whom formerly came under the $10.00 classification.

The indications are that the amending of the Contitution instituting a $15.00 fee from those employing from fifty to one hundred hands, was a wise enactment. Nearly one hundred more during the current year have voluntarily remitted $15.00 instead of $10.00, as previously.

Estimated receipts from members' fees, 1907-1908..	$28,000.00
Interest	400 00
	$28,400 00
General expense	24,000 00
	$4,400 00

Respectfully submitted,
GEO. BOOTH, *Treasurer.*

Mr. Booth moved, seconded by Mr. C. C. Ballantyne, that the Treasurer's report be adopted.

The President stated the motion and said: The report is now open for discussion, gentlemen. The balance sheet is here properly certified by the auditor.

There being no discussion the President put the motion to adopt the report, which, on a vote having been taken, was declared carried.

The President.—We have with us to-day Mr. Archibald Blue, who is going to deliver an address upon the progress of Canada in the twentieth century, but as Mr. Blue is not at the moment present in the room we might go on with one of the reports. I will call on Mr. Meek to read the report of the Reception and Membership Committee.

Mr. Charles Meek, Chairman, presented and read the report of the Reception and Membership Committee.

REPORT OF THE RECEPTION AND MEMBERSHIP COMMITTEE.

At last year's annual meeting some important changes were made in the membership by-law, with a view to drawing the lines more closely against those who were not *bona-fide* manufacturers. The feeling has slowly, but surely, been gaining ground that the Association should exercise the greatest care in selecting its new members, so as to guard against the pos-

sible admission of men whose chief interests lie in pursuits other than manufacturing.

During the year just closed your Reception and Membership Committee has kept this point well in mind in applying itself to the duties of office. Inquiries regarding the eligibility of prospective members have been conducted more thoroughly than ever before. Endorsement forms, specially printed for the purpose, have been sent in each case to a number of the members most likely to be acquainted with the applicant, and, therefore, able to supply the desired information about his business. Where the replies thus obtained have not been satisfactory other channels of inquiry have been used ; in short no stone has been left unturned to see that the wishes of the Association were strictly observed.

The Year's Progress.

In the twelve months ending July 31st, 231 applications and 146 resignations were passed, a net gain for the year of 85. While the increase is not so large as in some previous years, it is nevertheless regarded as satisfactory considering all the circumstances. Since 1900 the expansion of the Association has been very rapid, and as it has advanced, the field left for the Committee to work in has steadily contracted. To maintain the old rate of progress indefinitely would have been quite impossible, and the figures for the past year indicate that for the future we must be satisfied with more moderate gains.

The number of resignations is rather larger than usual, but the Committee has satisfied itself that the reasons were sufficient in every case to warrant acceptance. For the most part they were due to amalgamations, retirements from business or financial failures. In some few instances disappointment over the tariff revision has led to the loss of a member, while the increase in fees for Class B membership from $10 to $15 has also caused some desertions. Any losses from the latter source, however, have been more than made up for by the increased revenue derived.

Distribution of Membership.

The total membership on July 31st last was 2,189, distributed as follows :

By Provinces.		By Branches.	
Ontario	1,287	Toronto	558
Quebec	576	Montreal	431
Nova Scotia	94	Quebec City	68
New Brunswick	44	Nova Scotia	94
P. E. Island	3	Manitoba	103
Manitoba	103	British Columbia	68
British Columbia	68	General	867
Alberta	13		
Saskatchewan	1		

Classified on the basis of fees paid, the figures are :

Class A. (up to 50 hands, $10)	1,549
Class B. (up to 100 hands, $15)	101
Class C. (over 100 hands, $25)	362
Class D. (additional representatives, $10)	177

The Membership Campaign.

Throughout the year the work of canvassing for new members has been vigorously proceeded with. Local committees have been appointed by the various branches to co-operate with the general committee, and particularly in Monteral, Winnipeg and Toronto have done effective work. A selected list of non-members has been systematically supplied with literature advertising the Association's usefulness. On two occasions an appeal was made to the general membership to assist in the work, with results that were fairly satisfactory.

It is believed, however, that much more could be done along this line if those who have profited by the Association's activity would only interest themselves in enlisting the support of their fellow-manufacturers. No matter how convincing the literature sent out by the Head Office may be, it is never so effective as the personal solicitation of one who can speak from experience of the advantages of being a member. While the large majority of the more important establishments are now undoubtedly connected with the Association, there must still be a considerable number of eligible and desirable firms that could be secured if gone after in this way. All of them have been indirectly benefited by the work of the Association, and it should be an easy matter to make them realize that its existence is a necessity to them. On the other hand, the Association does not hesitate to say that it needs them, not only for the financial support they would lend, but for the increased influence and prestige to be had from the use of their names. It is to be hoped, therefore, that members will look on it more and more as a duty they owe the Association to induce such people to join.



CHAS. S. MEEK
(Stewart, Howe & Meek Co., Ltd.)
Chairman Reception and Membership Committee, 1906-07

In this connection it may be stated that one difficulty the Committee has met with has been the unfortunate inability of many of the Association's best friends to explain the nature of the work that is being carried on. When the opportunity to do a little missionary work arises they are forced to admit that they are out of touch with what the Head Office is doing. To overcome this difficulty it was decided some few months ago to issue a quarterly circular, summing up the more important results achieved and drawing attention to the various kinds of personal service which the Association was in a position to render. The first of these was issued in May, under the title, "Quarterly Dividend No. 1." Apparently it met with a favorable reception ; certainly it demonstrated its usefulness in canvassing for new members. Your Committee would recommend that this feature be continued.

Western Excursion.

On behalf of last year's Committee it is a pleasure to report that the excursion from Winnipeg to the coast and re-

turn proved a great success. It was participated in by as many as the train could conveniently carry, and all expressed themselves as delighted with the outing. Wherever stops were made advantage was taken of the opportunity to say a few words about the Association, and to explain the principles for which it stands. Considered purely as an advertisement, the excursion did the Association great service. Financially, too, it was a success, there being a surplus after meeting all expenses of $963.31, which was in due course turned over to the general fund.

Receptions.

In January your Committee arranged an informal dinner in honor of Mr. Richard Grigg, of the British Board of Trade, and Mr. Graham Gow, Trade Commissioner from New Zealand, at which about seventy-five members were present. Through the winter a series of noon-day luncheons were held under the auspices of the Toronto Branch, at which subjects of interest to local manufacturers were discussed. The Montreal members marked the close of their winter's work by a smoker that proved to be the most successful and enjoyable event of the kind in the history of their branch. The visits of the President and Secretary to Halifax, St. John, Quebec and Winnipeg were also made the occasions for small gatherings of members, at which the work of the Association was explained at length. While only one of these functions was arranged for by your Committee, it is fitting that mention should be made of the others as illustrating the manner in which members are brought together at least once a year to renew their acquaintance one with another, and to keep alive an interest in their organization.

Branch Extension.

Permission was recently requested by the Toronto Branch to extend its field of operations, so as to include all members within a radius of fifteen miles from the centre of the city. Having ascertained that this proposal was acceptable to members in the territory affected, your Committee approved of same, and in due course it was acted upon by the Executive Council.

Council Meetings.

At the kind invitation of the Montreal Branch, the January meeting of the Executive Council was held in that city. It had been felt for some time that the meetings should occasionally take place there in deference to the wishes of the Montreal members of the Council who were seldom able to attend the meetings in Toronto. The success of the experiment was so pronounced as to leave no room for doubt as to the advisability of repeating it. Ottawa members have also expressed a desire to hold a meeting of the Council in their city. Your Committee is inclined to regard the proposal with favor, and would suggest that a date, shortly after the opening of Parliament, be selected for that purpose.

Annual Meetings.

As usual, responsibility for the convention arrangements has rested largely with this Committee, though acknowledgments are due to the various sub-committees of the Toronto Branch, that have worked indefatigably to make the affair a success. It is entirely to their efforts that we are indebted for the splendid programme of entertainment which has been mapped out, for the privileges extended, and for the comforts and conveniences with which we are surrounded. It is hoped that the general arrangements will meet with approval.

Respectfully submitted on behalf of the Committee.

CHAS. S. MEEK, *Chairman.* G. M. MURRAY, *Secretary.*

The report was greeted with applause.

The President.—Gentlemen, the adoption of the report which you have just heard has been moved by Mr. Meek, seconded by Mr. McLaughlan. The report is now open for discussion.

There being no discussion the question was called for.

The President put the motion to adopt the report, which, on a vote having been taken, was declared carried.

The President.—We will now have the pleasure of an address from Mr. Blue, as I see he is present with us.

Mr. Archibald Blue then addressed the meeting on "Some illustrations of the growth of Canada in the twentieth century."

The address will be found in another part of the present number of INDUSTRIAL CANADA.

The address was received with applause.

Mr. D. Lorne McGibbon.—It gives me very great pleasure to move a vote of thanks of the members of this Association to Mr. Archibald Blue for his very able and instructive address on the progress of Canada. I am sure if these figures were not given to us by such a well known authority on statistics as



MR. E. COATSWORTH
(Mayor of Toronto.)

Mr. Blue, we would not believe them; and I am quite sure that a number of us will look forward to getting a copy of this address so that we will be able to study it in detail. I am also sure that each member will have more confidence in the future of Canada when we see what has taken place within the last few years in the development of Canada. I have much pleasure in moving a vote of thanks of the Association to Mr. Blue.

Mr. W. K. George.—I have very much pleasure indeed in seconding the vote of thanks, proposed by Mr. McGibbon, from this Association to Mr. Archibald Blue, in recognition of the very able address he has given us this afternoon.

The President put the motion, which, on a vote having been taken, was declared carried (applause).

The President (to Mr. Blue).—I have very much pleasure in tendering to you the hearty thanks of the Association.

The Vice-President, Hon. J. D. Rolland, then took the chair and called on Mr. Harry Cockshutt, to deliver his Presidential address.

THE PRESIDENT'S ADDRESS

A Statesmanlike Review of Canada's Industrial Progress

IT is my privilege this afternoon, as President of the Canadian Manufacturers' Association, to bid you all a hearty welcome to our annual deliberations. I do so with more than ordinary pleasure, as we meet for the first time in four years in my own home Province, the Province of Ontario.

Since our last gathering in Toronto we have held Conventions in Montreal, in Quebec, and in Winnipeg. Twice have we crossed a continent to the far away waters of the Pacific; once have we crossed an ocean to visit the land of our forefathers, and whilst we have been fascinated by the charms of our ancient capitals, so rich in historic associations, yet so blessed with present-day prosperity; whilst we have enthused over the teeming resources of the West and viewed with satisfaction its rapid developments; whilst we have gloried in the splendor of the Motherland and rejoiced in her continued greatness, we can still come back to the sunny fields and busy workshops of old Canada and say from the bottom of our hearts, "Here, indeed, is a land to live for; here, if need be, a land to die for."



HARRY COCKSHUTT
(Cockshutt Plow Co., Ltd.)
PRESIDENT, 1906-07

We in Ontario are proud of our Province, proud to call it our home, proud to claim it as our field of labor. Much has been said and written of the tremendous expansion in the West, but the fact remains Ontario farms and Ontario factories still lead the rest of Canada in the volume of their production. It is particularly appropriate, therefore, that we as manufacturers should periodically meet in the Queen City of Canada's Banner Province to review the work of our Association and to shape its future policy.

Looking Backward.

The year just closed has been marked by a steady growth in most branches of Canadian industry. Production has materially increased, and since it is by production that we gauge a nation's prosperity, we may assume that Canada has been fairly prosperous.

The tide of immigration has continued to sweep through our gates in ever-increasing volume. The railroads, hungry for traffic, have burrowed their way with feelers of steel through 3,000 miles of new territory, opening up for us new markets and bringing back to our doors the raw materials of a virgin soil and of a virgin forest. Our factories have been kept busily employed, and sales on the whole have kept pace with the advancement in other lines. Though collections from the West have been poor, it is satisfactory to note that there were fewer commercial failures in 1906 than any year since 1896. Savings bank deposits on June 30th last show an increase over 1906 of $53,644,783, while the confidence of our financial institutions in Canadian enterprise is forcibly illustrated by the jump in current loans from $559,338,229 in 1906 to $639,970,696 in 1907.

Agriculture.

The prosperity of our country is directly traceable to the soundness of our basic industries, and of these the chief corner-stone is agriculture. Our mines, rich beyond the dreams of avarice, will one day be exhausted; our fisheries have already begun to show signs of having reached their maximum yield; our forest wealth is year by year retreating to the wilds of the North in the face of devastating fires and the onslaught of the lumbermen's axe, but the fertile soil of Canada will ever remain a treasure house of inexhaustible wealth, the key to which is a plowshare and a reaping hook. Less than one hundred years ago the land upon which we now stand was little more than a clearing, cut out of the forest primeval; to-day the Ontario farm lands yield an annual crop of 190,000,000 bushels of grain. Less than forty years ago Manitoba and the Provinces beyond were to us an unknown quantity, a name on the map but nothing more. Last year the combined yield of Manitoba, Alberta and Saskatchewan was 211,000,000 bushels of grain. It is agriculture that has built the city of Winnipeg, with its 125,000 inhabitants; agriculture that has covered the North-West with a network of railway; agriculture that has erected a chain of elevators from Edmonton to Port Arthur, with a capacity of over 55,000,000 bushels; agriculture that has developed our splendid Upper Lake Marine with its tonnage of 165,000; agriculture that has built and maintained the majority of the factories represented in our Association. As Canadians we are all proud of our agricultural industry; we are proud of the men who have made it what it is, and we are glad to do honor to them here to-day.

It is indeed a pleasure to note the steps our Federal and Provincial Governments are taking to foster the growth of this important industry, and to establish it upon a sound and economic basis. No one will rejoice more heartily than

the manufacturer in the success which has followed the work of the experimental farms. In so far as they have contributed to a better understanding of the scientific side of agriculture, and made it possible to grow two blades of grass where one grew before, they have benefited not alone the farmer, but the entire country. The same is equally true of the encouragement given by the Government to agriculture in other ways. The attention which is paid to dairying, cold storage, and the marketing of Canadian butter and cheese abroad has worked wonders for the farm. Its experimentation and research along the line of scientific stock feeding and dairying has revolutionized the industry, in Ontario and Quebec at least, where farmers are now amassing small fortunes by feeding their crop products to live stock instead of marketing them direct. The Government has taught our farmers, as it were, the first principles of manufacturing; it has shown them how to turn out a more hightly finished article; how to utilize wastes in the manufacture of by-products, and how to prevent depreciation of plant, which, in their case, means how to prevent soil exhaustion.

Forestry.

It is gratifying, too, to note the awakening of interest in another of our basic industries. I refer to forestry. This subject is one of such tremendous scope that it is impossible to do more than touch upon its fringe. Apart altogether from the material uses to which they may be put, forests are of incalculable value in tempering our climate. They are a potent factor in inducing rain-fall, and in regulating the run-off of surface water. Without them the rivers of Canada, particularly in hilly districts, would be raging torrents to-day and insignificant streams to-morrow. The magnificent water falls which mean so much to the industrial future of our country would fluctuate between extremes that would make hydraulic development well nigh impossible. Last year Canada imported over six million tons of coal, worth on a very conservative estimate, $25,000,000, and when one considers the extent to which these importations might be replaced by the white coal of electrical energy, one cannot but be impressed with the importance of preserving intact so valuable an asset.

The figures representing the value and quantity of our standing timber are so large as to be fairly startling. The Superintendent of Forestry has stated that at the very lowest estimate there must be 281,240 square miles of wooded land still vested in the Crown. Supposing that this land will yield only 2,000 feet per acre, or 1,280,000 feet to the square mile, over ten inches at the stump, it means a production of 359,987,200,000 feet of matured timber on which the Government royalty at the rate of $1.00 per thousand would be $359,987,200. If to this we add the value of the timber to the community at large, our forest wealth assumes a magnitude quite beyond the grasp of the imagination.

Per head of population, Canada easily stands first among the countries of the world in forest wealth, with 148 acres of wooded land for every man, woman and child within her borders. Norway and Sweden come next with about nine acres each, followed by the United States with only seven.

Here is surely an estate worthy of our greatest care. And yet, if reports be true, huge tracts are year by year being devastated by fire, involving the loss of millions of dollars. Not long since a settler in Quebec, to clear ground for a five-acre potato patch, started a fire which burned $5,000,000 worth of pine timber. In the Ottawa valley the annual loss by fire is nine times the value of the lumbermen's cut. In North Saskatchewan the cut is said to be only one per cent. of the total annual destruction, while amongst the resinous timber acres of the far North fires have been known to sweep across the country for hundreds of miles with such destructive fury that literally hundreds of millions of dollars have vanished into thin air in the course of a few days.

These losses are particularly regrettable in view of the fact that many of them might easily be prevented by the exercise of greater care on the part of railway employees, settlers, prospectors and hunters. Fires originating on private property from the same causes which so often mark their commencement on Government lands would inevitably be followed by rigid prosecutions, and there seems no valid reason why the same course should not be pursued in both cases.

The whole question is one of such tremendous importance



Head Office of the Canadian Manufacturers' Association, Toronto

to Canada that it is surely time we were adopting a vigorous forestry policy. It seems to me that the first step to this end should be a careful stock-taking of our national possessions. We must not lose sight of the fact that in this matter we are simply acting as trustees for posterity, and that even as we have received a priceless estate from our forefathers, so will it be our duty in turn to hand it over to those who are to follow us with its value unimpaired. I would favor the immediate creation of more forest reserves; particularly is it important that the heights of land where so many of our rivers find their source should be under perpetual forest. I believe that no reasonable expense should be spared in providing our forest land with fire rangers sufficient in number to properly protect them. I am further of the opinion that legislation should be enacted making it a criminal offence, punishable by imprisonment, to expose our forests in any way to danger from fire.

The administration of such an estate is, I believe, of

sufficient importance to justify the Government in creating a Portfolio of Forestry. In addition to the duties above referred to, a Minister of the Crown might render valuable service in encouraging the establishment of schools of forestry, where practical instruction would be given on a subject which seems destined to form the ground work of one of our foremost professions. He might also extend the scope of the tree-planting operations which the Government has carried on with much success for the past five years. The 9,346,000 trees with which the prairie provinces have been dotted since 1901 mean a great deal to the farmers of the West, yet the territory to be benefited is so vast that nothing more than a beginning has been made.

Export Duty on Pulp.

In this connection I wish to express my strong personal sympathy with the proposal to place an export duty on pulpwood. The United States consumes 2,500,000 cords of pulp wood every year, of which Canada now supplies twenty-five per cent. By allowing this material to leave our country in its unmanufactured state, we are simply contributing to the upbuilding of our greatest industrial rival, whereas the imposition of an export duty would unquestionably compel the investment of United States capital in Canadian pulp mills; would provide employment for thousands of Canadian workmen, and would ultimately open the door for the sale of Canadian pulp across the border. Every year we defer our decision in this matter we relatively weaken ourselves and strengthen a highly protected competitor whom we already have reason to fear; moreover, we postpone the enjoyment of a prosperity which is well within our reach.

Fishing and Mining.

If time but permitted I should like to refer at length to the progress of our other basic industries, fishing and mining. Of both of them we may justly feel proud, the former with its yield for 1906 of $30,000,000, and the latter of $80,000,000. No national industrial policy would be complete which did not pay due regard to their interests, and it is a pleasure, therefore, to observe the steady encouragement given by the Government to their development. Biological stations and fish hatcheries, schools of mining and geological surveys have all been productive of the greatest good, and we, as manufacturers, will, I am sure, gladly endorse any further efforts that will promote the prosperity of these industries and add to our wealth as a nation.

For manufacturing can only prosper as all other industries prosper. Agriculture, forestry, mining and fishing are, in a sense, the foundations upon which we build. Where they leave off in the process of production we begin. Their finished product is our raw material. Yet the obverse statement is equally true that our finished product is their raw material, for the tools, the machinery, the clothing and the articles of food turned out by our factories constitute the necessary equipment for the farmer, the lumbermen, the miner and the fisherman to pursue their respective occupations. No one industry is sufficient unto itself; all are inseparable, interwoven and interdependent the one upon the other. What helps one indirectly helps the other; what retards one indirectly retards the others. It is for this reason we are glad to bear our share of the expense incurred in promoting the welfare of the basic industries, and for a similar reason we feel sure that those engaged in these occupations will not hesitate to co-operate with us in shaping conditions that will be beneficial to manufacturing.

Manufacturing.

The importance of Canadian factories to the community at large happily needs little pointing out. There was a time, not so very many years ago, when public opinion consigned them to a secondary position in the scale of industries, but the expansion they have undergone in recent times has entirely dispelled any erroneous ideas as to their real significance. According to some figures supplied by the Census Commissioner, regarding industries in 1901, the value of manufactured goods produced in that year exceeded by $110,000,000 the combined value of the production of agriculture, dairying, mining, lumbering and fishing. While the figures for 1906 are not available in all these departments, it seems safe to estimate, in view of the numerous increases in our manufacturing output, that the relative proportions have not materially altered to our disadvantage.

But perhaps the best touch-stone to determine the economic value of any industry is the number of people to whom it gives employment, and the amount of money it distributes in wages. When measured by this test, manufacturing stands pre-eminent among its fellow industries. In 1905 the wage earners in Canadian factories numbered 391,487, as against 344,035, in 1900, a gain for the five years of 47,452. Wages for the same period increased from $113,249,350 to $164,394,490, a gain of $51,145,140 or forty-five per cent. In 1900 the average yearly wage per employee was $329.17, in 1905 it was 419.91, a gain of $90.74 or twenty-seven per cent. Each of these comparisons tells its own story of progress and expansion, of activity in our work-shops, of business for our shop-keepers, and of home comforts and more congenial surroundings for our working classes.



Characteristic Poses

But Canada has been no exception to the rule. For some years past the industrial nations of the world have all been enjoying remarkable prosperity. Expansion has been general, buyers have been plentiful, and as a consequence there has

not been the same eager haste to enter foreign markets. Conditions more favorable than those for the Canadian producer could scarcely be desired, for the competition he has had to meet in the home market from the products of specialized industry and cheap foreign labor has been at its lowest ebb. It is not surprising, therefore, that he should have made considerable progress, and we are quite prepared for the census announcement that during the five-year period the output of our factories has increased from $481,053,371 to $717,118,092.

And yet, substantial as this growth may seem to have been, Canadian manufacturers have no more than kept pace with the expansion in other directions. At any rate they have not materially strengthened their hold on the home market, as may be seen from the following simple calculation: If to the output of our factories for any year we add the imports of manufactured goods, and from the amount so obtained deduct the exports of manufactured goods, the result should represent the home consumption of manufactured goods, providing we leave out of consideration the stocks carried over unsold, which we have no means of estimating. And further, if from the output of our factories we deduct the exports of manufactured goods, the result should represent the proportion of manufactured goods marketed at home. By following out these various steps, with the aid of figures supplied me by the Census Department, I find that the home consumption in 1901 was approximately $539,953,002, of which Canadian manufacturers supplied $401,221,709, or roughly, seventy-four per cent. By 1906 the home consumption had increased to $972,930,286, of which Canadian manufacturers supplied $595,830,253, or roughly, seventy-five per cent. Relatively speaking, therefore, the manufactures of this country are in the same position to-day that they were five years ago. Their capital has increased, their wage bill has increased, their output has increased, but their share in the Canadian home market has remained practically at a standstill.

Parenthetically it should be stated that while the above calculation is sufficiently accurate and logical, so far as indicating any increase or decrease is concerned, the percentage of the home market which it shows the Canadian manufacturer to be supplying must be liberally discounted by reason of the numerous instances of duplication in the census figures of output. For example, the value which is set upon the flour produced by the miller again appears in the value of the bread made by the baker; the value of the leather produced by the tanner is counted a second time in the value of the footwear made by the shoemaker. I simply mention this fact lest it be inferred that the Canadian manufacturer actually controls seventy-five per cent. of the home market. In reality his share of the trade is considerably smaller, though in proportion to the gross volume of business done in manufactured goods it was practically the same at both census periods.

The trade and navigation returns give further evidence of the fact that we are not progressing as we should. Compared with an increase in factory production between census periods of forty-eight per cent., the imports of dutiable goods, goods which are taxed to encourage their production in Canada, show an increase of fifty-three per cent. Our export trade shows a regrettable tendency to fall away. Comparing the figures of 1907 with those for 1906 in the exports of merchandise, there is an actual decrease of $5,862,754. Ever since 1901 our imports have been increasing much more rapidly than our exports, with the result that a balance of trade in our favor that year of $6,072,107 has, for the twelve months ending June last, been converted into an adverse balance of $104,476,142.

Such conditions should not obtain in a young country like Canada, for, with the variety and abundance of our natural resources, combined with native enterprise, we should easily be able to produce enough for our own requirements and have a substantial surplus to sell to countries that are more thickly populated and less richly endowed. By the adoption of a policy sufficiently protective, such as our Association has always advocated, capital would be irresistably attracted by the opportunities here afforded. Our home market would be supplied by home industries, manufacturing would become more specialized, the cost of production would be reduced, and a substantial beginning would be made towards the development of an export trade that would successfully carry us over any ordinary period of domestic depression.

It is deeply to be regretted that the significance of the figures above referred to did not appeal to the Government when making their revision of the tariff, for they clearly indicate what we may expect, under a continuance of the present policy, when the inevitable period of depression overtakes us. A tariff which under the most favorable circumstances barely enables our manufacturing establishments to relatively hold their own, cannot but prove utterly inadequate to stem the swelling tide of imports when the foreign producer seriously and systematically prepares to unload his surplus products on the Canadian market.

And this he will do, as surely as the sun will rise on the morrow, the moment that darkening days begin to restrict his trade in other quarters. No hastily improvised tariff will then suffice to secure for Canada a continuance of her present prosperity. Retrenchment, not expansion, will be the policy of capital. Production will be curtailed, workmen will be thrown out of employment, and hard times will once more be found knocking at our doors.

We believe it to be the part of wisdom to guard against the possibility of such a situation materializing by affording immediate encouragement to the investment of capital in our manufacturing enterprises. It is only by so doing that we can firmly entrench ourselves against foreign competition and build up the industries of our country on a sure and solid foundation.

Preferential Trade.

Our attitude towards the policy of an imperial preference has been so frequently misconstrued that it becomes my duty to repeat what all my predecessors in office since 1902 have stated in their annual messages. As Canadians we stand first and foremost for the upbuilding of our own country. Our aim is to produce from Canadian materials and with Canadian labor everything which the economic conditions of this country permit of our producing. To this end we ask for a tariff whose minimum protection will be high enough to reserve the home market for the Canadian manufacturer. We realize, however, that there are many articles we do not and cannot produce in this country, and when it becomes necessary for us to go abroad, we believe in a preference which will give the Mother Country and our sister colonies the refusal of our trade, before passing it on to foreigners. In other words, our motto is, "Keep your money in circulation at home by buying goods made in Canada, and when you cannot get what you want at home, buy within the British Empire."

Financial.

But deeply as we have been disappointed over the tariff revision, our apprehensions on that score have for some months past been giving away to the dangers of a new situa-

tion that has arisen from an unexpected quarter. I refer to the present financial stringency. Like a threatening cloud the scarcity of money began to be noticed on the financial horizon early in the year. Slowly but steadily it has advanced, spreading itself out in all directions until to-day the outlook is more or less overcast.

Paradoxical though it may seem, trade is very good. Orders are plentiful. Our factories are working to their capacity. Settlers keep hurrying to our shores in steadily-increasing numbers. Yet there is a most embarrassing lack of money to provide for necessary expansion, and even to support the business we already enjoy.

While the situation is a complicated one, we are able to look back over the perspective of the past few months and lay our finger on a few of the causes that have contributed to the present stringency. Inadequate transportation facilities throughout the winter seriously interfered with the marketing of last year's crop and with the deliveries of manufactured goods, so that collections have been delayed, and in many instances orders cancelled. Speculation in Western farm lands and town lots has run riot, and money that should have been sent East to discharge debts owing to manufacturers and wholesalers has been used to purchase more land. From this cause alone Eastern houses have been compelled to carry many thousands of dollars on their books that would otherwise have been applied to the expansion of legitimate enterprise. The listing of some scores of Cobalt mining stocks on the Toronto and Montreal Mining Exchanges, and the seeming opportunity thereby afforded of acquiring a fortune quickly, and without effort, has resulted in the closing out of many savings bank accounts. Provincial loans which might have been negotiated abroad have been negotiated at home, to the detriment of Canadian industry, whose credit cannot so easily be pledged in Europe. For five years prior to 1906 there was a steady growth in the amount of coin and bullion in the country, the imports always exceeding the exports by a substantial amount. Last year, however, the tide was turned in the other direction, and we lost over $2,000,000, while for the twelve months ending June, 1907, our supply was decreased by a further $8,000,000. This fact seems particularly significant when considered in connection with the adverse balance of trade previously referred to, for it indicates that if we cannot settle our foreign obligations in goods we must sooner or later settle them in money.



MR. JOHN HENDRY
(B. C. Mills, Timber and Trading Co.)
First Vice-President, 1907-08.

None of the items I have mentioned points to any inherent weakness in our financial institutions. On the contrary, they rather lead to the belief that the stringency is due to some slight over-development and an unfortunate combination of untoward circumstances. The resources of our banks are not unlimited; they cannot loan what they have not got, and if the savings of a prosperous community seek other channels for investment the banks cannot be held responsible.

I feel that the criticisms to which our banks have been subjected is uncalled for by reason of their having increased the amount of their call loans in New York. At a critical time, like the present, it is of the utmost importance that they should keep up their reserves. Money at call in New York is practically the same as cash in hand, for it can always be had at twenty-four hours' notice, which is just what is required in times like these. Personally I have every confidence in the men who have given the country one of the finest banking systems in the world, and I feel sure that as a result of their concerted policy the best interests of Canadian industry will ultimately be served.

Operating Conditions.

A further obstacle to the natural expansion of our manufacturing enterprises, an obstacle that seems to be ever present with us, is the scarcity of skilled labor. All branches of trade have suffered more or less from this cause during the present year. The country is growing, new districts are being opened up, the market for manufactured goods is expanding, but the strength of our artisan class shows no tendency to increase in proportion. In five years the number of workpeople in Canadian factories has increased by only twelve per cent., whereas the wages paid have increased forty-five per cent. It is not, therefore, a question of wages. The average employer is willing to pay anything within reason. But the workmen are not to be had; they are not in the country.

The difficulty admits of but two solutions, either we must import more artisans from other countries, or we must provide educational facilities whereby our own young Canadians will be able to qualify themselves for the more important positions in our factories. The first method is the one means of obtaining immediate relief; the second is the one means of ensuring an adequate supply for our future needs.

It is to be regretted that the Government has not seen its way clear to meet the wishes of the Association in regard to the immigration of skilled mechanics. Without any desire to belittle the importance of providing the country with more farm hands and more railroad laborers, we maintain it is only fair and reasonable that our immigration policy should reflect the requirements of all classes of industry. To stimulate development in one department and leave another unprepared to meet the sudden demands that must inevitably be made upon it is, we believe, short-sighted and unstatesmanlike, and it is with reluctance that we have been compelled, since our last annual meeting, to assume the expense of encouraging this class of immigration ourselves.

Technical Education.

It is further to be regretted that the Government has hesitated to act in the matter of Technical Education. The rapid development of trade schools and schools of technology in all the great industrial countries of the world practically forces upon Canada a policy of liberal encouragement in this direc-

tion, if she is to keep pace with the advancing quality of foreign manufactured products. Technical education, more than anything else, is an incentive to individual effort amongst our working classes. It opens the door to industrial preferment, elevates the standard of living, and removes one of the most fruitful sources of unrest and discontent.

Immigration.

Apart from the objection referred to above, immigration has continued to improve, both in quantity and quality. For the fiscal year ending June 30, 1906, it was 189,064; for the twelve months ending June 30, 1907, it was 252,038, a gain of 62,974, or thirty three per cent. A satisfactory feature of this growth has been our steady increase of immigration from the United Kingdom. For 1906 it was 86,796; for 1907 it was 115,051, a gain of 28,255. It is also gratifying to note that this year for the first time Canada is attracting more British emigration than the United States, the latter country receiving approximately only 102,000, as against our 115,000.

Labor Conditions.

One of the most regrettable features of the labor situation is the steady growth in the number and importance of industrial disputes. According to the Labor Gazette, there were 128 strikes in Canada during the twelve months of 1906, the largest for any year on record, with the single exception of 1903. The number of people directly affected was 26,014, and the actual loss of working days was 489,775. Even at the low estimate of $1.50 per day, this means a direct loss to the working people of our country for one year of $734,662. And yet it represents but a fraction of the loss to the community at large, for to it we must add the loss entailed upon manufacturers and employers through the suspension and disorganization of their business, as well as the general falling-off in trade by reason of the diminished purchasing power of our labor classes.

From whatever point of view they may be regarded, strikes are always to be deplored. As a prominent welfare worker in the Association recently remarked, "You never win but you lose." Financially they are a dead loss to the country, for in stopping the wheels of industry they stop production, and production is the only way to increase wealth. Socially they create conditions conducive to violence and lawlessness on the one hand, and suffering and privation on the other. For these reasons I am of the opinion that our Association would be undertaking a noble work if it would devise means of reducing the number of industrial disputes.

Transportation.

I have already had occasion, in discussing the financial situation, to refer to the inadequacy of our transportation facilities. The subject is one upon which I should like to dwell at considerable length, for I consider it second in importance to no other question before the Canadian public today, but time prevents my referring to more than one or two aspects of it.

Generally speaking, freight transportation constitutes a far greater tax on the people of this country than the customs tariff. The total duty collected in 1906 was $46,471,101, which, estimating the population at 6,000,000 means a tax per head of $7.78. The total revenue to the railways from the carriage of merchandise for the same period was $81,433,115, a tax per head of $13.57. While I do not wish to be understood as in any way objecting to this amount, I feel that it behooves us as business men to see that we receive full value for it. Further, I feel that paying as much as we do, we are entitled to a service commensurate with our needs.

That the present equipment of Canadian lines is far from sufficient to meet the demands made upon them by the Canadian shipping public is all too apparent. Let me cite a few figures in connection with the distribution of grain shipments from the North-West. In 1905 Canadian vessels carried away 29,763,910 bushels from the spout at Port Arthur and Fort William; last year they carried away 31,978,341, an increase of over two million bushels. Deliveries of Canadian grain to Canadian ports in 1905 were 30,488,969 bushels, last year they were only 27,924,436 bushels, a decrease of about two and one-half millions. Deliveries of Canadian grain to United States ports amounting to 10,493,823 in 1905 rose to 16,451,907 in 1906, an increase of six million.

From the above it would appear that while our vessels are providing a better service and carrying a bigger tonnage, they are delivering less freight to Canadian ports and more to United States ports.

The inference is obvious; Canadian railways are not prepared to handle the traffic from the boats, whereas United States railways are.

This conclusion is borne out by other comparisons which may be made. The total receipts of Canadian grain at the port of Montreal were greater by 1,653,830 bushels in 1906 than in 1905. Shipments to Montreal by the all-water route were greater by 2,394,615 bushels in 1906 than in 1905. The difference, therefore, 740,785 bushels, represents the falling away in receipts by rail. Again, the exports of Canadian grain via Montreal in 1905 were 9,954,348; in 1906 they were 14,298,251, an increase of 43 per cent. The exports of Canadian grain via United States ports in 1905 were 12,119,637, in 1906 they were 24,159,240, an increase of almost 100 per cent.

Statistics, I know, are not easily absorbed, but even at the risk of becoming wearisome I must venture to refer to the statement of railroad equipment prepared by the Department of Railways and Canals. For the years 1905 and 1906 the figures are as follows:

	Miles in Operation.	Locomotives.	Cattle, Box, Platform, Dump & Coal Cars.	Tons Freight Carried.
1906	21,353	2931	88,749	57,966,713
1905	20,487	2906	84,685	50,893,957
Increase ..	866	25	4,064	7,072,756

From the above it will be seen that in proportion to the miles of road in operation, there were fewer locomotives in 1906 than in 1905. This is, perhaps, offset to some extent by the increased traction power of the new style locomotives, yet the significant fact cannot be overlooked that for the operation of 866 miles of new track only 25 locomotives were provided. The proportion of freight cars shows, it is true, a slight improvement, one car for every 244 miles of track in 1905, as against one for every 241 in 1906. Here, too, allowance must be made for the increased capacity of the modern type of car, but even so it is evident that the railroads are adding to their equipment only in about the same ratio that they are adding to their mileage.

All the figures which I have quoted clearly indicate that our companies are making little progress towards taking care of the growing volume of traffic on the older portions of their lines. As a result of their failure to provide the necessary facilities business is being diverted into other channels, and the ports of a foreign country are being built up at the expense of our own.

Such a condition of affairs can only be regarded as a national misfortune. Every pound of Canadian produce that is forwarded to destination by a purely Canadian route provides a market for Canadian labor and encourages the investment of capital in Canadian enterprises, whereas every

pound of Canadian produce that is forwarded to destination by a United States route goes to enrich a rival nation and relatively to weaken ourselves.

In so far as this condition is due to congestion, the railway companies cannot be held wholly to blame. Manufacturers themselves have in many cases failed to keep their freight handling equipment up to the proper standard. For this they must be held strictly to account. But the railways have been by far the worse offenders. In order to head off future competition they have spent their money in building new lines through undeveloped country, when they should have spent it in properly equipping the ones already in operation. As a result every section has suffered from the shortage of cars. Eastern business houses have been crippled, and Western settlers have been left to suffer from cold and hunger. The situation is most serious, and I believe Parliament would be acting in the best interests of the community at large if it would refuse to grant any more charters to old roads for the construction of branch lines until such time as the lines they are now operating are properly equipped and in a position satisfactorily to handle all traffic offering.

Insurance.

Coming to the work of the Association proper there is just one feature I wish to touch upon, and that is the subject of Fire Insurance.

Notwithstanding the protests that have been voiced on all sides throughout the year against the burdensome taxes imposed by the Companies, high rates have continued to prevail, and there is no indication that any measures of relief are in contemplation.

Both from financial and patriotic reasons it is desirable that the premiums paid on Canadian risks should be kept as far as possible in the country. Out of $14,712,030 paid in premiums during 1906 on purely Canadian business, only $3,193,470 or, roughly, twenty-two per cent. went to Canadian companies, the balance going to build up foreign financial institutions and feed foreign industrial enterprises.

This it is which has justified our Association in lending its best support to the organization of two Mutual Fire Insurance Companies. Our object has been not only to serve the Canadian manufacturer, by providing some insurance at actual cost, but also to demonstrate the possibilities of a system of mutual insurance, so that as the years go by the tendency will steadily be towards the development of our own resources and the upbuilding of our own institutions.

In attempting to establish ourselves in this field new legislative ground has had to be broken, and the most strenuous opposition from so-called "vested interests" has had to be met. The year has, therefore, been marked by sustained and persistent fighting. But success has now practically crowned our efforts; the ground has been broken, and for the future there is open to us the possibility of a development commensurate with the needs of the manufacturers, and of the country.

The Association.

I will not attempt further to anticipate the work of the Association during the year just closed. The reports of the various committees are before you. Each tells its own story of results achieved, each brings its own message of hope for still greater things in the future.

To all of us it must be a source of satisfaction that our efforts as an Association have proved beneficial, not to ourselves alone, but to the manufacturing industries of the country as a whole. Every Canadian manufacturer, be his interests large or be they small, has profited by our activity. Every Canadian manufacturer is to-day enjoying advantages that would never have been his but for the effective work of our organization.

As individuals we cannot afford to spend either the time or the money required to remedy general grievances, or to improve general conditions. Success in matters of this kind is possible only by co-operation, and the fuller and freer the co-operation the greater the measure of success.

Thus far we have had the united support of 2,200 manufacturers, yet I venture to say there are hundreds of others who have never contributed one cent of their money towards defraying the cost of work whereby they have profited equally with ourselves.

My one wish in laying down the cares of office would be that this great body of manufacturers outside our membership might speedily be convinced of the fact that they need the Association as much as the Association needs them; that, realizing this, they might assist us in extending the sphere of our operations; that they might join hands with us in advancing those principles for which we have always stood, and thus hasten the day when Canada will take rank among the great industrial nations of the world.

In closing, let me say to you how much I have appreciated the kindly way in which all the members of the Association have treated me during my term of office. Especially are my thanks due to the Executive Council, to the Committees, and to the Chairmen of same. They have taken an earnest and active interest in the Association, and the success of the year is, to a large extent, due to their efforts, and again I cannot say how much I have appreciated their kindly help.

During the year we have lost our old Secretary, Mr. Stewart, whom all of you knew as a hard and faithful worker. We have also lost Mr. Marlow, Manager of the Transportation Department, whose services have resulted in such general benefit to the shippers of this country. I am glad to say to you, however, that we have in their places been able to secure men who have proven themselves capable in every way of handling the work of the Association. Our General Secretary, Mr. Murray, deserves the greatest credit for the able way in which he has looked after the affairs of the Association since his appointment, and what I have to say of him relates, also, to all the other members of the staff.

To the Canadian Manufacturers' Association for the coming year, and to my successor in office, I wish the greatest success and utmost prosperity.

The President's address was received with prolonged applause.

Mr. C. C. Ballantyne.—Mr. Chairman and gentlemen,—It is indeed a great privilege and pleasure to me to move, seconded by Mr. W. K. George, a hearty vote of thanks to our worthy President, for the most able and instructive address which we have had the privilege of listening to to-day. I can assure you, Mr. President, that the members of the Canadian Manufacturers' Association are very proud of you indeed. (Hear, hear!) It is impossible for us at this time to fully grasp all the important features which you have set forth so faithfully in your address, but at our leisure when it is published in INDUSTRIAL CANADA we shall have time to read it over in detail. I therefore, Mr. Chairman and gentlemen, have very much pleasure indeed in moving a vote of thanks to our President for his very able address. (Applause).

Mr. W. K. George.—Mr. Rolland, I beg to second the vote of thanks moved by our past President, Mr. Ballantyne, and I would ask you to put the motion to the meeting.

Hon. Mr. Rolland.—Gentlemen, you have heard the motion moved by Mr. Ballantyne, seconded by Mr. George, that a vote of thanks be tendered to our President, Mr. Cockshutt, for the illuminating and instructive address that he has

given to us. This address, as has been said by Mr. Ballantyne, will certainly form a subject for the study of our members and will prove very interesting, and I hope very effective. I will now put the motion.

The Vice-President put the motion, which, on a rising vote having been taken, was declared carried amid applause.

The President.—Gentlemen, I thank you most heartily for the vote of thanks which you have tendered me.

Mr. George Brigden will now present the report of the INDUSTRIAL CANADA Committee, after which we will adjourn the session.

Mr. Brigden presented and read the report of the INDUSTRIAL CANADA Committee.

REPORT OF THE "INDUSTRIAL CANADA" COMMITTEE.

The truth of the old adage that "Nothing succeeds like success," is aptly illustrated in the progress that is being made from year to year by the Association's official organ, the Committee in charge of which has pleasure in submitting the following report for 1906-1907 :

Financial.

Those who attended the annual meeting in Quebec will recall the regret with which the Committee was compelled to report a deficit of $1,067.85 on the year's business. It was firmly believed by the Committee of the following year that INDUSTRIAL CANADA should and could be placed on a self-sustaining basis. Steps were immediately taken to reorganize the paper's financial department, and by effecting economies wherever possible, and at the same time instituting a vigorous campaign for new advertising, the deficit referred to was, ere another twelve months, converted into a surplus of $1,259.17. When the present Committee assumed charge, therefore, the paper was in a flourishing condition ; not only was it paying its own way, but it was contributing a substantial sum to the Association's revenue.

Throughout the year just closed your Committee have closely followed the line of policy laid down by their predecessors in office. Exceptionally favorable terms were obtained for the printing, expenditure of every sort was carefully scrutinized, and a close watch was kept over the collection of accounts. The advertising field was worked over more thoroughly than ever before, and a score of new contracts were secured, in addition to the renewal of practically all the old ones. As a net result it is gratifying to be able to report the largest surplus in the paper's history. After allowing a liberal margin of $900 for bad and doubtful debts, INDUSTRIAL CANADA's revenue account shows a credit balance for the year of $2,853.89, an increase over 1906 of more than $1,500, and over 1905 of more than $3,700. As may be seen from the Treasurer's statement, the actual cash receipts exceed the disbursements by $3,348.14, which is in itself evidence that the collections have been well looked after.

The fixed charges against INDUSTRIAL CANADA include a fair share of the office rental, telephone, stationery and postage, besides the entire salary of the editor, the advertising manager and one stenographer. In addition to the above, it is, of course, charged with the cost of all cuts, the paper, composition, printing, binding and mailing of the monthly issue, as well as travelling and other expenses that may be incurred in its behalf.

The gross earnings per month are now slightly in excess of $1,000. Their advance has been at a uniformly steady rate, showing each month a fair increase over the corresponding month of 1905-06.

It is, perhaps, only fair to state that owing to the new agreement between the master printers and the Typographical Union, which became effective in June last, the printing of INDUSTRIAL CANADA will now cost the Association nearly $100 a month more, so that in the ordinary course of events the showing for next year will not likely be so good. In addition to this, your Committee feel that the time has come when the Association should seriously consider the engagement of expert editorial assistance. To meet these added items of expense, the present revenue, while ample, will be none too much, and it is of the first importance, therefore, that the advertising contracts for the coming year should be well looked after.

Size and Circulation.

Side by side with this growth in earning capacity, there is to be noticed a healthy growth in size and circulation. The volume ending with the July number contains in all 974 pages, a gain over 1906 of 124 pages. The average size of the monthly issue, exclusive of special numbers, was for 1906-1907, 72 pages, as against 65 in 1905-1906, and 57 in 1904-1905. Much of this increase is, of course, due to the added volume of advertising matter, though the aim of your Committee has been to maintain a fairly fixed ratio between reading and advertising, and to add to the former from time to time such an amount of space as seemed justified by the growing revenue from the latter. The average monthly circulation to-day is approximately 200 more than it was a year ago.



MR. GEO. BRIGDEN
(Toronto Engraving Co.)
Chairman "Industrial Canada" Committee, 1906-07

Typographical.

The suggestion has more than once been received that INDUSTRIAL CANADA might with advantage be reduced to what is known as standard magazine size. It was believed that a change of this kind, together with the use of a slightly larger face of reading type, would give the paper a much smarter appearance. Your Committee beg to report that they have gone very carefully into this matter, but regret that they cannot see their way clear to recommend any changes along the lines proposed, for the reason that they would materially increase the cost of publication, and at the same time give rise to considerable dissatisfaction on the part of the present advertisers. So long as the latter are prepared to support the

paper as liberally as they are doing, it is thought to be unwise to alter existing arrangements.

Editorial.

The editorial columns of the paper continue to be used to advocate those principles, for which we, as manufacturers, are banded together.

They still preach the doctrine of adequate protection as the only means of enabling our great national industries to grow to maturity, untrammelled by ruinous competition from abroad. They still proclaim the fact—now happily becoming an accepted one—that Canadian goods are good goods, comparable with the best, and, therefore, worthy of confidence from the Canadian buying public. The paper's discussions on insurance have helped to make possible the establishment of the mutual companies, of which the Association may justly be proud. They have prepared the ground, not only among members, but among the public generally, for the improvements in service and methods that the department is striving for. The articles on transportation have been equally helpful in educating the business men of this country to a proper appreciation of the importance of the problems with which the Association is grappling. In this connection, it is worthy of note, as instancing the value which outsiders attach to INDUSTRIAL CANADA as a medium of publicity, that the Canadian Freight Association have requested your Committee to publish the circulars they issue to shippers from time to time.

Situations Wanted.

Acting upon the suggestion received from the British Office Committee, a new department was commenced in the July issue for the benefit of British artisans wishing to come to Canada to seek employment. As such a step is in line with the Association's general policy to encourage the immigration of skilled labor, it is hoped that members will make use of the department whenever possible.

In conclusion, your Committee desire to record their grateful appreciation of the liberal support which the members generally have given to INDUSTRIAL CANADA. Such loyalty to the Association's official organ has made it indeed a pleasure to be associated with its management. For their successors in office they bespeak the same assistance that has been so freely given themselves.

All of which is respectfully submitted.

GEO. BRIGDEN, *Chairman.* G. M. MURRAY, *Secretary.*

The report was greeted with applause.

Mr. Brigden moved, seconded by Mr. Ballantyne, that the report be adopted.

The President put the motion to adopt the report, which, on a vote having been taken, was declared carried.

The Secretary made the announcements, after which the President declared the Convention adjourned until Wednesday, September 25th, at 9.30 a.m.

THE RECEPTION.

The reception tendered by the Toronto Branch to the members in the King Edward on Tuesday evening was a splendid function. The beautiful balcony, rich with tapestries and oriental rugs and luxurious in its furnishings, was thronged with guests. In the reception-room President and Mrs. Harry Cockshutt and Mr. and Mrs. Ed. Freyseng welcomed the members and their ladies, with a hospitality that characterized the whole evening's entertainment. The drawing-room presented a fitting contrast to the balcony. In the latter the subdued lights and dull richness of the decorations were suggestive of repose. In the former the brilliancy alike of lights and decorations invited a gaiety which won its response in the vivacity and sprightliness that permeated the whole assemblage. The handsome toilettes of the ladies made a picture of outstanding beauty. It was a fitting prelude to the social events of the Convention.

After the guests had been officially received, Hon. J. J. Foy, Attorney-General for the Province of Ontario, and Mayor Coatsworth, in graceful speeches welcomed the manufacturers to Toronto. Hon. J. D. Rolland thanked the representatives of the Government and the City Council for their welcome.

One of the most pleasing features of the Convention then took place in the presentation to Mr. C. C. Ballantyne, of an illuminated address by the Association. Mr. Harry Cockshutt spoke in an appreciative way of the good work Mr. Ballantyne



Characteristic Poses

had accomplished during his term of office as President. Mr. Ballantyne had proved himself an able officer, under whose administration the Association had grown strong and robust. The President's speech was punctuated by applause constituting a spontaneous expression of approval which has never been excelled within the Association. Mr. G. M. Murray then read the address which formed the presentation. Mr. Ballantyne briefly thanked the members for the remembrance and felicitated the Association on its growth and position.

During the evening Mrs. Ed. Freyseng sang most acceptably in solo and with Mr. Arthur Blight in duet. Mr. Blight and Mr. Harold Frederick Massey, soloists, were received with marked favor.

After the programme, refreshments were served in the reception room. The guests then indulged in social intercourse, which was all the more enjoyable from the fact that

many were from out of the city and were then renewing friendships made at previous conventions. Last year's excursion to the coast was revived in many a recollection called up by the meeting of old friends. It was a late hour when the gathering unwillingly broke up.

WEDNESDAY, Sept. 25th, 1907.

MORNING SESSION.

At 10 o'clock a.m. the President took the chair, and, having called the Convention to order, requested Mr. A. S. Rogers to read the report of the Parliamentary Committee. However, as this was a very important report, and the attendance was small, it was decided to allow it to stand for the present and take up the report of the British Office Committee. In the absence of the Chairman, Mr. Watts, the report was read by the Secretary, Mr. G. M. Murray.

REPORT OF THE BRITISH OFFICE COMMITTEE.

It is with more than ordinary pleasure that your Committee, charged with making the necessary arrangements for the opening of an office in Great Britain, presents its first annual report.

Before entering into any explanation of what has actually been done, it is desirable to recall for a moment the recommendations adopted by the Winnipeg Convention for the government of such an office. They were briefly, as follows :

1. The office should be a general one for the work of the Association, and not for the particular purpose of securing labor.

2. The Association should make an annual appropriation of $2,000 towards its maintenance.

3. Expenses in excess of this amount should be met by charging small fees for services rendered.

4. All its affairs should be under the supervision of a standing committee appointed for that purpose.

The first step of the Special Committee of 1906, temporarily continued in office, was to recommend the appointment of the following gentlemen as members of the Standing Committee : Messrs. Geo. W. Watts (Chairman), Thomas Findley, Gerhard Heintzman, W. B. Tindall, J. P. Murray, John Turnbull, Geo. McLagan, L. J. Breithaupt, Robt. McLaughlin, C. Bermingham, S. W. Ewing, Louis Simpson.

This recommendation having been approved of by the Executive Council, the Committee now reporting entered upon its duties.

Appointment of London Agent.

Twenty-six applications were considered from parties wishing to act as the Association's British representative. Before arriving at any decision it was first necessary for your Committee definitely to decide the nature and scope of the duties which the representative would have to perform, so that care could then be taken to secure a man with the desired qualifications.

In debating this question there were two points that weighed heavily with your Committee ; first, that the chief function the office would be called upon to exercise, for the present at least, would be to supply members with skilled help ; and, second, that it would be an exceedingly difficult matter to secure a man qualified to act in this capacity who would also be able to act with credit as the Association's representative in other matters. While somewhat at variance, therefore, with the recommendations of the last annual meeting, it was unanimously decided by your Committee that the appointment of a general representative should be postponed, and that for the time being an experienced and well qualified party should be engaged to act as special labor agent for the Association in Great Britain.

After a careful survey of the field the appointment was offered to Mr. Louis Leopold at a salary of $1,750 per year, on the understanding that he would collect no fees, either from members served or from mechanics placed, though he might still arrange with the steamship companies for his commission on bookings. This, it will be observed, was well within the appropriation authorized. The offer was duly accepted by Mr. Leopold, who came to Canada and personally visited a number of centres, so as to acquaint himself with the conditions surrounding employment in the various trades.

The Fees Charged.

In order that the office might involve the Association in as little expense as possible, it was decided to ask a fee from



The Convention Place—Entrance to King Edward Hotel

those members taking advantage of its facilities. After due consideration the following scale of charges was finally adopted :

For engaging employees who will earn less than $5 per week	$2 00
For engaging employees who will earn from $5 to $10 per week	3 00
For engaging employees who will earn from $10 to $18 per week	4 00
For engaging employees who will earn more than $18 per week	5 00

Before commencing operations your Committee deemed it advisable to take such precautions as would spare the Association any possible criticism on the ground that it was misrepresenting conditions in Canada, and seeking to bring out workmen for whom there was not steady employment. In a circular announcing the inauguration of the department, sent to members on February 1st, the position of the Association in this matter was made perfectly clear, and members were informed that it would be necessary for them, in availing themselves of the services of the department, to make their application on a form approved by the Committee. This form was drawn up with a view to supplying the prospective em-

ployee with all the particulars he would desire to know, while at the same time placing the London agent in possession of all the information necessary to enable him to procure the exact class of help wanted. Thus far its use has been attended with most satisfactory results, not a single charge of misrepresentation having been made. There were, it is true, two or three minor complaints on the part of artisans whose feelings had been worked upon by labor agitators, but these were readily answered by reference to their signed statements to the effect that they had carefully read the applications under which they had been brought out, and were aware of all the conditions surrounding employment referred to therein.

Analysis of Help Engaged.

The applications received to date number in all 70. They come from 61 different members of the Association, and call for 838 work people. Distributed according to the provinces in which they will be employed, 516 of these work people are for Ontario, 234 for Quebec, 3 for New Brunswick, 35 for Nova Scotia, 10 for Manitoba, and 40 for Alberta. Classified according to the wages they will receive, 95 will fall in the class drawing less than $5 per week; 303 in the class from $5 to $10 per week; 414 in the class from $10 to $18 per week, and 26 will receive over $18 per week. The large majority—602—will be males, 29 of whom will bring their families with them.

The following analysis on the basis of occupations to be pursued is interesting, as illustrating the variety of trades affected by the present scarcity of labor. The figures indicate the number of hands the Association has applications for :

Engravers and lithographers	24
Manufacturing stationers	5
Printers	7
Weavers and spinners	136
Knitters	54
Dyers	2
Garment makers	35
Cordage makers	20
Machinists	47
Moulders	50
Tinsmiths	10
Boilermakers	45
Pattern makers	2
Riveters	9
Handymen and helpers	62
Painters	9
Ship joiners and ship carpenters	25
Wood turners	3
Cabinet makers and upholsterers	44
Gilders, polishers and buffers	21
Paper makers	30
Leather workers	7
Confectioners	16
Carriage workers	3
Cigar makers	75
Jewellers	7
Glazers	2
Musical instrument maker	1
Color mixers	6
Wire and straw weavers	6
Laborers	75

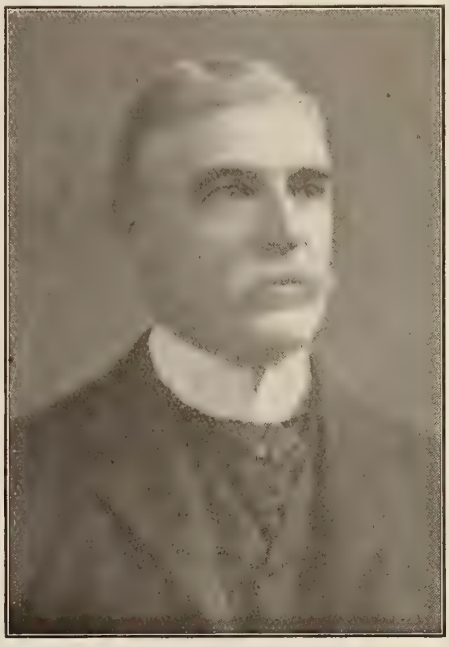
Reports received from the London Office up to September 1st show that by that date 430 hands had been engaged, all but a very few of whom had actually sailed for Canada. The balance of the applications is being filled as rapidly as is consistent with careful and efficient work, and members generally have expressed themselves as well satisfied with the results.

Considerable difficulty was experienced by Mr. Leopold, particularly in the spring, in securing accommodation on the boats for the hands he had engaged, by reason of the fact that railroad contractors and other large employers of labor had reserved the space on many of the vessels for weeks ahead. This difficulty is now fast disappearing, and help is arriving in larger and more regular parties.

Another difficulty he has had to contend with has been to secure men who were able to pay their own passage out. Employers have been very reluctant to authorize him to advance fares, for reasons that do not require explanation. As a result a great deal more time has been consumed in filling applications than would otherwise have been necessary. This is, perhaps, offset to some extent by the fact that the class of men thus secured is, generally speaking, more satisfactory.

Financial.

The total amount standing at the credit of the British Office on the books of the Association on August 31st was



MR. ROBT. HOBSON
(Hamilton Steel and Iron Co., Ltd.)
Ontario Vice-President, 1907-08

$1,118.30, of which $216.35 had been collected, the balance, $901.95, being earned, but still unpaid. As against this there were cash disbursements and outstanding liabilities of $1,530.58. Included in the latter amount, however, were $271.00 of preliminary expenses. Compared with current expenses, therefore, the revenue is most gratifying, as it indicates that the office is operating almost on a self-sustaining basis.

Collections have been somewhat slow, owing to the fact that only a few contracts have been actually filled. Credit is given the office for each employee as he is engaged, and remittances are rendered members accordingly, but many of the latter have expressed a desire to defer settlement until the entire order has been satisfactory filled.

Difficulties Encountered.

It would be useless to attempt to conceal the fact that cases of dissatisfaction sometimes occur. No matter how much care is exercised in the selection of men, a certain percentage will always prove to be disappointments. The incompetent man, whom no one will employ at home, will frequently misrepresent things in order to obtain a start in some new field of

labor. Occasionally, too, the employer invites trouble for himself by failing to make his instructions sufficiently explicit. Particularly in the initial stages of a labor bureau's operations is dissatisfaction likely to arise from causes of this kind. Experience, however, is a valuable teacher, and it should rather be a matter of congratulation than otherwise that the pitfalls have been encountered and passed with so little serious trouble. The policy of the Committee has been to replace unsatisfactory employees without extra charge, and members who have been supplied with inferior help are requested to report their complaints promptly, to exercise a little patience, and to give the department further opportunity to demonstrate its usefulness.

Twelve cases have been brought to the notice of your Committee, where employees have failed to report at destination. Unfortunately nothing can be done to stop this practice, which happily is by no means common. If a man pays his own way out he is at perfect liberty on arrival to accept work wherever he can find it; if he has been assisted, the contract he has signed is invalid unless signed afresh in Canada, and even then there is little satisfaction in prosecuting a party from whom it is impossible to recover.

An effort was made to have the steamship companies check baggage through to destination, in hopes that by mailing the checks to the employer on this side the employee's arrival at proper destination would be ensured. In this however, our London agent was unsuccessful, the companies being unwilling to make any change in their old system of handling baggage without checks. The only solution seems to lie in exercising greater care with the selection of men, to see that they are honorable enough to stand by the employers whose promise of work has been their encouragement to emigrate.

Encouraging Desirable Immigrants.

In the course of his work the Association's agent has received applications from a great many desirable artisans who wish to come to Canada, but for whom there are no vacancies among the lists supplied him from time to time by employers. It has seemed to your Committee that consistency with the Association's policy to encourage the immigration of skilled workmen required that something be done to find these people work. A recommendation was accordingly made to the Industrial Canada Committee, that mention should be made of each individual case in the columns of the Association's official organ. It is a pleasure to state that the idea was at once adopted. and many artisans are now being assisted to employment in this way.

In connection with the correspondence referred to in the report of the Parliamentary Committee, as passing between the Association and the Minister of the Interior, it might be mentioned that an effort was made to have the Government immigration agents in the United Kingdom recognize our London office to the extent of referring inquiries regarding the employment of skilled labor in Canada to it for information and advice. Notwithstanding the fact that it was pointed out that the Association was an incorporated body with responsible officers, the Government declined to act in the manner indicated.

In conclusion, your Committee wishes to express its appreciation, not only of the liberal support given to the new Labor Department, but also of the indulgence of those members whose wants have not been supplied as satisfactorily as they might have been. It is believed that the progress thus far made is most gratifying, and that with the advantage of a varied experience the department will steadily increase in usefulness and efficiency.

All of which is respectfully submitted.

GEO. W. WATTS, *Chairman.* G. M. MURRAY, *Secretary.*

Mr. Scarfe moved, seconded by Mr. Wilson, that the report as read be adopted.

The President.—Gentlemen, you have heard the report read and the motion for its adoption. It is now open for consideration. Does anyone wish to say anything upon this report?

Mr. E. G. Henderson.—I would like to ask if the Minister of the Interior gives any reason for refusing to have the Immigration Officials in England refer these applications to our office in London?

The Secretary.—In answer to the question raised by Mr. Henderson I might state that while our correspondence with the Minister dealt very explicitly with that feature of the situation, in his reply that point was completely ignored. His reply dealt almost entirely with the justification which they had for bringing in agricultural laborers and railroad navvies, but so far as assigning any reason for refusing to direct applicants to enquirers for skilled labor in this country our correspondence was ignored.

Mr. E. G. Henderson.—It seems to me, that being the case, it is time this Association made some kind of protest. We were told yesterday by Mr. Blue that the interests of the Manufacturers of Canada were greater than anything else in the country, and yet here we make a request to the Minister of the Interior and it is totally ignored. It is a remarkable thing that the representations and protestations of all the labor organizations are fully recognized by the Government, but when a large body like the Manufacturers' Association makes a request it is entirely ignored. I think it is time we, as a body, made a strong protest against such treatment.

The President.—I think you will find that that will come up in the Parliamentary Committee's report. The matter can then, perhaps, be more thoroughly discussed.

The President put the motion to adopt the report, which, on a vote having been taken, was declared carried.

The President.—The next item we have on the agenda is an address by Mr. Sam Harris. He is not present and we will proceed with the next report. We will now have the report of the Parliamentary Committee, by Mr. A. S. Rogers.

Mr. Rogers.—Mr. President and Gentlemen.—Before reading the report I would like to mention that there was an inadvertant omission in the printed list of names of this Committee of the name of Mr. J. O. Thorn, who was a faithful attendant at the meetings and a valuable member. Also I wish to express my very great appreciation of the work of our Secretary in connection with this Committee—the former Secretary, Mr. Stewart, and particularly the present Secretary, Mr. Murray. Mr. Murray, taking up this work in the middle of the year, entered upon a very difficult task, and I confess I admire very much the efficient manner in which he took hold of it and the great help he gave us. The details of the work were largely in his hands, and he gave our Committee most efficient service, for which we are very grateful.

In presenting this report is it your wish, gentlemen, that we should take it clause by clause?

The President.—I think it would be a good idea to take the report up clause by clause and if there is any subject matter that the members wish to discuss in the different clauses they can do so, and then we can adopt the report as a whole afterwards. Is that your pleasure, gentlemen?

(Consent was given).

For greater convenience of reference, the report is printed in full here. The discussion of clauses follows.

REPORT OF THE PARLIAMENTARY COMMITTEE.

Your Parliamentary Committee is pleased to submit the following review of matters that have engaged its attention during the year just closed. In all eleven meetings have been held, and a close watch has been kept over legislation, both Dominion and Provincial, where the interests of manufacturers seemed to be affected.

The Labor Situation.

While the field of your Committee's activity has been varied, it is perhaps worthy of note that the greater part of its time has had to be given to the consideration of questions directly affecting the relations of capital and labor. Trade unionism has continued to follow an aggressive course in seeking to further its own interests at the expense of the community at large. At Ottawa, at Quebec, and at Toronto, labor agitators have been steadily at work, clamoring for the enactment of class legislation, and endeavoring to enlist the support of members of both political parties. It is only a few years since the representations of organized labor carried considerable weight in parliamentary circles, but more recently, thanks to the determined opposition of associations like our own, its efforts have met with less success. In such matters as immigration, however, its influence is still exerted to some effect, to the detriment, be it said, of our manufacturing industries and the country generally. That legislators, in order to obtain favor with unincorporated bodies, who have steadily declined to assume their lawful responsibilities, should adopt measures which react upon those whose interest are centred in the upbuilding of the nation, indicates a regrettable degree of weakness, and points to the necessity for vigorous and concerted action by the employing classes if they are to protect their own.

Scarcity of Labor.

The scarcity of skilled labor continues to act as a serious obstacle to the natural expansion of Canadian industry. Development of all kinds is progressing at a rate which makes it difficult for manufacturers to keep pace with the swelling tide of orders. New factories are being erected. Old factories are being enlarged. In five years our output of manufactured goods has increased nearly 50 per cent. And yet, according to the blue books, our imports are growing more rapidly than ever before, while our exports for the four months ending July have actually fallen behind. So far as machinery is concerned, Canada is well equipped to produce many millions of manufactured goods more than she is doing, but the wheels of industry are all too often left to rust in idleness, for no other reason than that it is impossible to procure skilled help to operate them.

Realizing the seriousness of the situation, your Committee has again pointed out to the Government the importance of advertising Canada's needs abroad, in such a way as to encourage the immigration of skilled artisans. Settlers and railroad navvies we need, and need badly, but we maintain it is a short-sighted policy that seeks to stimulate the growth of one industry, while it allows another, and, equally important industry, to struggle along as best it can against the unequal odds of foreign competition.

In laying the Association's views before the Government your Committee has been met with the reply that there is little hope of any change of policy, that they have seen no reason to alter their attitude as defined in the instructions issued to booking agents last November, wherein they state that "The demand in Canada is for people to occupy the, as yet, vacant lands of the country, to aid in the cultivation of those already occupied, and also to assist in providing additional transportation facilities. This it is which justifies the Government in assuming the expense of immigration effort. To go beyond the attempt to meet these requirements would be to use the money of certain classes of Canadian taxpayers for the purpose of securing competitors against them in their several callings, for which they would naturally hold the Government to account." To say nothing of the inconsistency which a union of farm laborers or railroad navvies might be able to point out in such an argument, it implies a deference to the demands of organized labor, which seems difficult to understand, for, as has frequently been pointed out, the unions represent less than 10 per cent. of the workers in our industrial establishments. Moreover, to pay a commission for bringing out laborers, and to refuse to pay it for bringing out artisans, would indicate that, in the opinion of the Government, the man who digs a ditch is worth more to Canada than the man who builds a house.

The Association is already on record as regards immigration, in the form of the following resolution, which your Committee would recommend be reaffirmed in annual meeting :

"Whereas it is necessary for the permanent development of



MR. A. S. ROGERS
(Queen City Oil Co.)
Chairman Parliamentary Com., 1906-07

Canada, and in the true interests of all its citizens, that the manufacturing, farming, lumbering, contracting and other industries of the country should be able to procure a sufficient supply of skilled and unskilled labor to produce and manufacture, as far as possible, what is required for home consumption and to increase our exports abroad ;

"And whereas, the rapid growth of new settlements and industries throughout the country, the mining camps, the enormous railway and other construction in progress, or in prospect, are withdrawing a constantly increasing number of skilled and unskilled men from the older parts of the country, who are greatly needed in the factories, as well as on the farms of these districts ;

"And whereas, employers are prevented by the Alien Labor Act from bringing workmen from the United States, and our Government immigration agents abroad not only do not encourage, but, in effect, discourage immigration to Canada of skilled artisans ;

"And whereas, the scarcity of good workmen, both on the

farms and in the towns and cities, has become a matter of public notoriety, which cannot be gainsaid :

"*Resolved*,—That the Dominion Government be respectfully urged to encourage, through its present immigration officers, and by the appointment of special representatives for this purpose, the immigration not only of farm laborers, but also of skilled mechanics, where opportunities are known to exist, and thus assist in building up our national industries."

The Eight Hour Day.

Early in the year an affort was made by the unions, through their representatives in Parliament, to bring about the adoption of an eight hour day on all Government contract work. Such a proposal seemed to your Committee most objectionable, for, besides disorganizing business, it aimed to prohibit every employer and every employee who worked more than eight hours a day from sharing in Government orders. When it was remembered, however, that it would likely prove but the thin



MR. D. LORNE McGIBBON
(The Canadian Rubber Co. of Montreal, Ltd.)
Quebec Vice-President, 1907-08

end of the wedge, to be followed another year by a bill to make the eight hour day compulsory everywhere, it assumed a seriousness which justified your Committee in marshalling all its forces in opposition.

An eight hour day at the present stage of Canada's development is an industrial impossibility. A reduction in the hours of labor would mean that the shortage of help, already a serious problem, would be greatly accentuated. A shorter working day would mean an increased cost of production, which, in turn, would mean a material advance in prices to the consumer. With an increased cost of production the manufacturer would be at a decided disadvantage in meeting foreign competition, both at home and abroad. Shorter factory hours would also mean that hired help for the farm would be more difficult than ever to secure and to retain.

Having these facts in mind, your Committee instituted a vigorous campaign in opposition to the bill. Without going into details, it is gratifying to be able to report that the measure was finally withdrawn in order to save it from certain defeat.

Merchants' Shipping Act of Great Britain.

Through the instrumentality of the Federal Department of Labor, the Merchants' Shipping Act of Great Britain, was recently amended so as to make it a criminal offence to induce emigration by means of false representations. It appears that certain unscrupulous employment agents have in times past indulged in this practice, with results that were anything but beneficial to Canada. Your Committee have no sympathy for agents who would bring to this country men for whom there is no work, and, so far as it will check this evil, the legislation is to be commended.

It is believed, however, that due regard for all interests concerned would have dictated a policy that would act both ways, to punish not only those who, for the sake of gain, make false representations that tend to overcrowd the Canadian labor market, but also those who, by false representations, seek to maintain a scarcity of labor for their own selfish ends. There is abundant evidence of the fact that Canadian labor unions, through their affiliated societies in England, are endeavoring to check the emigration of skilled mechanics to this country by misrepresenting the actual conditions prevailing here, and it is to be regretted that the Government could not have devised some means of putting a stop to practices which result in checking valuable immigration.

The Lemieux Act.

After very careful consideration, your Committee decided to make no recommendations to the Government in the above matter. For the most part the Act applies to lines of business in which members of the Association are but indirectly interested. While generally speaking, the principle of conciliation is one to be approved of, the boards constituted under the Act are, so far as Canada is concerned, a decided innovation. It is plainly the part of wisdom, therefore, to go slowly, to test them out carefully in a narrow sphere of action before giving them a wider application. The Act is now on trial, and its operation will be watched by manufacturers with deep interest.

United States Silver.

It is a matter of regret that the Department of Finance has delayed acting on the Association's recommendations regarding the exportation of United States silver. The arrangement effected early in 1906 with the Bankers' Association, whereby the Government bore the cost of shipping this coinage out of the country, appears to have worked out to the satisfaction of both parties, and to have accomplished the desired result. At the end of three months, however, the limited appropriation voted for the purpose was exhausted, and the arrangement has not since been renewed. As pointed out in the resolution of 1903, it is desirable, both from financial and patriotic reasons, that foreign silver coinage circulating in Canada should be replaced by coins of our own. Now that the Ottawa mint is nearing completion, it is believed that it would be an opportune time to urge the matter once more upon the Government. It is recommended by the Committee that this be done.

An Ottawa Representative.

On account of the variety and importance of the Association's interests at Ottawa, it became apparent in the early part of the session that to properly care for them it would be necessary to have a man constantly on the ground who would act under the Committee's instructions, and keep them advised of new developments. An eminently suitable party was selected for this purpose, and it is gratifying to be able to report that he rendered satisfactory service.

Measurement of Water Flow and Rain Fall.

Requests have been received from different sources, asking for the support of the Association in a movement to have the various provincial governments record regularly the flow of water in their rivers, in order to facilitate the development of water power. There can be no doubt that this information would prove very valuable to engineers in determining the efficiency of water powers. Where estimates for hydraulic development have to be based on limited data and deductions drawn from observations covering only a brief period of time they are likely to be erroneous, frequently leading to serious results. Since the work could be done at moderate cost, and would likely result in the investment of more foreign capital in developing our water powers, it is recommended that the Association lend its assistance in the manner indicated.

Commercial Travellers' Taxes.

The Association's continued agitation for the repeal of provincial acts which impose taxes on commercial travellers from outside points, has borne fruit during the year, Quebec having abandoned her tax altogether, and British Columbia having dropped it as against all travellers, except those representing liquor and tobacco houses. It is to be regretted that Prince Edward Island has not yet seen its way clear to abandon a measure which her sister provinces have acknowledged to be an unreasonable interference with internal trade.

Ontario Legislation.

It is a pleasure to be able to state that the Stationary Engineers' Act of 1906, which was the subject of so much adverse criticism in this Committee's report a year ago, has been superceded by a new Act, which will be found much more satisfactory. The chief objection to the 1906 Act was that it was put through as an amendment to an old Act incorporating the Ontario Association of Stationary Engineers, thus delegating to a private organization powers that should have been exercised only by the Government.

Early in the year your Committee, in conjunction with other bodies, made strong representations to the Ontario Government, with the result that the Act was entirely recast, in such a way as to bring its administration directly under the supervision of the Department of Agriculture. Provision is now made to exempt from its operation steam heating plants working at a pressure of 20 lbs. or less. In cases of emergency a person who is not the holder of a certificate may be employed in operating a steam plant for a period of 30 days. Experienced engineers may, up to July 1st next, obtain certificates of competency without examination, and the Act will not apply to firemen working under the personal supervision of such engineers. Other improvements were fully set forth in a circular issued to members under date May 11th, accompanying which was a copy of the Act itself.

Joint Stock Company Act.

A bill to consolidate and amend the Ontario Companies' Act was the subject of careful study on the part of your Committee, and a number of recommendations subsequently made to the Provincial Secretary were incorporated in the measure as finally passed. Permission was granted to abbreviate the word "limited," under conditions which are carefully defined. The time allowed for company organization was extended from 40 to 90 days, with provision for further extension on application to the Lieutenant-Governor. A clause to prevent the payment of salaries to presidents and directors, unless authorized by by-law, confirmed by a vote of two-thirds in value of the shareholders present at a general meeting, was changed to make it permissible when confirmed simply by a majority vote. Certain restrictions surrounding the investment of company funds in high class securties were also removed.

Ontario Assessment Act.

Enquiries made of members throughout the Province of Ontario showed a general desire to have the Assessment Act amended in three ways: (1) To reduce the business assessment on manufacturers from 60 to 50 per cent.; (2) To place shareholders who were officers in incorporated companies on the same basis as partners in a partnership, so far as assessment on income was concerned; (3) To relieve employers from responsibility for the delivery of assessment and tax notices intended for their employees.



Characteristic Poses

As regards the last, a legal opinion was obtained to the effect that employers are not compelled, under the Act, to deliver notices to their employees, so no action was taken. Bills covering the first two points were drafted and introduced, but were finally allowed to drop in deference to the wish of the House that the Act be given another year's trial before being amended.

Ontario Bureau of Labor.

Following the change of management in the Ontario Bureau of Labor, an effort was made last fall to have the schedule of questions asked of manufacturers by the bureau amended in such a way as to relieve it of its objectionable features from the employer's standpoint, while still preserving its usefulness from the standpoint of labor. A memorandum em-

bodying the Committee's recommendations was accordingly drawn up and presented to the Minister of Public Works, and in due course an interview was had with the new Secretary of the Bureau, who seemed favorable to the changes suggested. When the schedule afterwards made its appearance, your Committee was disappointed to note that many of the questions to which particular exception had been taken were found to have been retained.

Failing to secure the elimination from the bureau's report of certain data regarding labor unions, your Committee endeavored to have it compiled in more complete form, so as to show of each union whether or not it was incorporated, the number of its men out of employment, its foreign affiliations, if any, the amount of money forwarded to foreign or international organizations, and its liability to assessment by such bodies. These recommendations have not as yet been adopted.

In other respects the report continues to invite criticism by reason of the worthless and misleading statements it contains, and an early opportunity will be taken to acquaint the Minister with the Committee's views.



MR. L. C. McINTYRE
(Pauline Chambers Co., Ltd.)
Manitoba Vice-President, 1907-08

Factory Inspectors.

A great deal of dissatisfaction has been caused by the report that the Ontario Government intends to fill the three new factory inspectorships from the ranks of organized labor. Among manufacturers the fear is expressed that when labor troubles beset them they may be subjected to unfair and annoying treatment by inspectors whose sympathies are biased, and who may use their authority to act as spies for the union. The members of the Cabinet have accordingly been advised that while the Association approves of the principle of factory inspection, it is strongly of the opinion that the inspectors appointed for this purpose should be chosen outside the membership of any association of employers or manufacturers or of any labor union.

Pawnbrokers.

The old Ontario regulations governing pawnbrokers left the door open to all kinds of dishonest practices, whereby the recovery of stolen goods was rendered exceedingly difficult. In co-operation with the Jewellers' Section, a bill was drafted, and finally passed by the House, which has been found to work out much more satisfactorily. It provides for a daily report to the Chief of Police, and prohibits the melting of gold or silver on the premises of any pawnbroker.

Quebec Legislation.

Through the activity of the Montreal Branch some important legislative work has been accomplished in the interests of the Province of Quebec members.

A bill to authorize the City of Montreal to impose a tax of $500 on the manufacturers of certain kinds of food products was defeated.

A proposal to extend the Montreal gas and electric contract for a 22-year term without consulting the ratepayers, led to the passing of an Act making it compulsory for all municipalities to submit to a vote any proposal to grant an exclusive franchise for the operation of public utilities for a period of more than ten years.

Attention was also directed to a number of abuses that had crept in under the Garnishment Act, and steps were taken to prevent the piling up of heavy costs against unfortunate debtors and wage-earners, as well as to spare employers the necessity of appearing so frequently in court.

Metallic Roofing Co. vs. Sheet Metal Workers' Union.

No review of the labor situation for the year would be complete without an extended reference to the developments in the above action, which has come to be a *cause celebre* in union litigation.

For the information of members who may not be familiar with the case, it may be stated that suit was entered by the Metallic Roofing Company some five years ago against Local No. 30, International Sheet Metal Workers' Union, to recover damages sustained by reason of a boycott instituted by the latter against the goods of the former. At the very outset the plaintiffs were met with the difficulty that an unincorporated union had no legal status, and could not, therefore, be sued. After much obstruction they succeeded in obtaining an order from the court, which practically defined the proper manner of entering suit against an unincorporated union to be by means of a representative action, wherein certain individual members, specified by the plaintiffs, would have to represent not only themselves, but every other member of the union with which they were connected. They next succeeded in establishing the fact that each of the individual members, not only of the local union, but of the international organization of which the local body was a recognized branch, was amenable to the law for the misdeeds committed by his officers or fellow-members in the name of the union, and that his goods could be seized to satisfy judgment.

Damages were in due course assessed by a jury at $7,000, and ordered by the court to be paid, which order was sustained on appeal. Failure on the part of the union to pay these damages led to the issue of a further order appointing the Metallic Roofing Company receiver for the union and all its individual members for a period of twenty years, subject to renewal for an equal period if the claims were not all satisfied at the end of that time.

The union then announced its intention of carrying the appeal to the Privy Council, and as a preliminary step to this end made application to have its case heard without security. This the plaintiffs opposed and the application was disallowed, otherwise it would have meant that no labor dispute in Canada, involving legal proceedings, would have terminated short of the Privy Council.

Whether the union will go ahead with its appeal under these circumstances remains to be seen. In any event the outcome of the action will be watched with keen interest, as

upon it will depend the validity of the legal precedents thus far established.

When it became necessary for the company to send their solicitor to England, your Committee felt that it was time for the Association to bear a share of the expense in maintaining a principle which was of the utmost importance and value to every employer of labor. A recommendation to this effect was accordingly sent on to the Executive Council and approved of, and in due course financial aid was given, accompanied by an expression of thanks from the Association for the valuable service the company had rendered in fixing the responsibility of trades unions.

The Union Label.

Spasmodic attempts have been made within the year to secure Government recognition of the Union Label. Following an effort to have its use made compulsory on all text-books authorized by the Ontario Education Department, a joint memorial was presented to the Premier of the Province by the Association and the Toronto employers. The matter is one which needs continual watching, at the Dominion and Provincial capitals, as well as in the various municipalities, where constant efforts are being put forth to secure its adoption on all kinds of civic contracts.

Other matters which the incoming Committee will require to give attention to are the laws relating to Compensation to Workmen and the Franchise for Incorporated Companies. The former are sadly in need of revision and consolidation, and, in Ontario at least, will probably receive consideration at the hands of the Government at the approaching session. With the latter question considerable progress has been made, and before another year has passed it is believed that some of the Provinces will have amended their statutes in conformity with the wishes of the Association.

In concluding this report, the Committee desires to record its grateful appreciation of the splendid manner in which the membership at large has come to its assistance in making representations at Ottawa. When it has been necessary to issue calls for assistance they have been responded to promptly and generously. The strength and value of the Association is never shown to better advantage than on occasions of this kind, and the efficiency of its organization is a matter upon which the members are to be congratulated.

All of which is respectfully submitted.

A. S. Rogers, *Chairman.* G. M. Murray, *Secretary.*

Mr. Rogers read clause *re* "The Labor Situation," which was adopted without discussion.

Mr. Rogers read clause *re* "Scarcity of Labor."

The President.—Gentlemen, that clause deals, I think, pretty fully with Mr. Henderson's remark, and there is the resolution submitted on the same subject. If there is anything to say upon this clause of the report we will be glad to hear you now. Of course the resolution will be finally adopted in the whole, but you have it now before you for discussion.

Mr. J. O. Thorn.—In connection with that portion of the report which has been read by Mr. Rogers, I would like to draw attention to the fact that the Trades and Labor Congress of Canada held a meeting in Winnipeg only last week, and amongst other things they pointed out this—I will read their exact words: "That our Executive cannot comment too severely upon the ill-advised action of the Canadian Manufacturers' Association in retaining as their special representative in England the notorious Louis Leopold, alias Lazarus, who, during this past month, continued to send workmen to this country under false representations as to the condition of the labor market in Canada."

And the Congress passed a resolution authorizing an assessment of 10c. per capita upon all those affiliated with the Congress for the purpose of raising a special fund to be used in sending and maintaining in Great Britain an agent, whose special business will be that of doing all that he possibly can towards deterring skilled mechanics and others from coming to Canada.

There is evidently a special effort being made to restrict, if possible, the incoming of skilled artisans, no matter whether it may be the Canadian Manufacturers' Association or anyone else that is trying to bring them into the country; and with reference to that it appears that Mr. Scott, the Dominion Superintendent of Immigration, has been asked to report upon regulations preventing immigrants coming into the country unless they have a certain amount of money. I think it is a well-known fact that there are many good, skilled mechanics in Great Britain, especially, who have been working for many years, but owing to various circumstances, are not possessed of very much means, but I see no valid reason why those men, as long as there are positions here



MR. T. M. CUTLER
(Acadia Sugar Refining Co., Ltd.)
Nova Scotia Vice-President, 1907-08

for them, should be prevented from coming into this country because they have not a certain amount of cash in their possession. In fact manufacturers have in many cases been advancing the railway and steamship fares for skilled mechanics and have been providing them with positions as soon as they arrived here. I think it would be most unfortunate if any law were passed preventing men of that kind coming into the country unless they were possessed of a certain amount of cash.

It is quite evident that politicians generally have felt that Labor Unions are of very great power in the land, that they represent a very large vote. I think we have very good proof of the fact that that is really not so. At the Trades and Labor Congress, held in Winnipeg, last week, the official report of the Secretary-Treasurer presented to that meeting shows that they have in affiliation with them 515 unions, representing 32,997 men; and further they say that there are about 20,000 other members of international unions in this country not affiliated. That makes only a total of about 50,000 union men in the Dominion of Canada. That is all the Trades and Labor Congress itself claims, and that, I think, to a very large extent dissipates the idea that the Trades and Labor vote has any very great strength to it.

Mr. E. G. Henderson.—The resolution covers the whole ground, but if I mistake not that resolution has been in effect

for more than a year. It does not seem to me that the resolution has accomplished anything. I think Mr. Thorn touched the pith of the whole matter when he said it was a question of votes. As I said before, this organization represents very much more than any labor organization or agricultural organization, and yet the Government pays attention to the labor agitators instead of paying attention to us. Why? They know very well, we as Liberals or Conservatives, will still go on voting for our party, but the vote of the Labor Organization is very easily changed, and it is nearly time we took that into our consideration if we are going to get anything from either Government. (Hear! hear!)

Mr. Rogers.—The Committee felt very keenly about this situation, that the Government should positively refuse, as they have done in the Department, to encourage the immigration of skilled men. Now, there is no doubt but that the Immigration Department has done good work in bringing out agricultural and other laborers. I understand they pay a premium and a commission for this work to booking agents, and their immigration agents themselves are instructed to



MR. F. L. HASZARD
(Charlottetown Condensed Milk Co., Ltd.)
P. E. I. Vice-President, 1907-08

encourage the immigration of agricultural laborers and so on, but as a matter of fact skilled artisans are discouraged by the booking agents from coming to this country. Why is it that that should be done? Is it not as much to the interest of the country generally as to the manufacturing class? By the exclusion of the skilled artisan the manufacturers get a certain amount of the better class of farm laborers, and in every part of the country, in the small hamlets, here, there and all over, the farmer knows there is a scarcity of men not only to do his farm work, but to build a barn or pig sty or anything else that requires a carpenter or mechanic. It seems to me that if some method could be adopted to let the country understand generally the influence and effect that the restriction of this importation of the better class of labor is having on business generally it would have a good effect. It seems unreasonable that the Government should be willing to pay booking agents commission for worthless men, so long as they are agriculturalists, and refuse to pay it for men who earn twice the money and are worth twice as much to the country.

Mr. J. Ransford.—Mr. President and Gentlemen.—I don't wish to detain you by going over ground that has already been covered, but I wish to raise my voice in protest against the policy that we have hitherto adopted of being as it were a suppliant at the knees of the Government. I am sick and tired of the way in which the Government treats the Canadian Manufacturers' Association. It seems to me, sir and gentlemen, that whatever we do, or whatever we ask for, is treated practically with—I don't think it is too strong a word to say—contempt. We ask for the most reasonable things and we simply get nothing in return. As a previous speaker, Mr. Henderson, remarked, this resolution we are now going to adopt has been passed by us before and has gained for us no results whatsoever. I am perfectly alive, as any other ordinary man is, to the advantage of going sometimes with what is called "policy," but where is the good of everlastingly continuing policy or politic action? Why shouldn't we get up boldly and express ourselves and say what we think? I would remind you that the Trades Unions and the Labor Organizations do not hesitate to ask for what they want; they do not hesitate to express plainly what they think. I would remind you that the agricultural organizations, the farmer, does not hesitate to say what he wants and thinks. Why should we everlastingly be talking about adequate protection when we believe in protection pure and simple? And why should we be everlastingly talking about protection until our industries reach maturity? We only make ourselves a laughing stock; we only form and create a subject for a clever cartoon on the part of the humorist who comes out and draws something very funny for the people to laugh at, about infant industries.

I myself would be in favor of cutting out this clause altogether and not going before the Government any longer respectfully soliciting this or that. We have proved the futility of that action beyond a doubt. Let us go to work and do what any other sensible men would do under the circumstances—help ourselves. We have established an agency in England, let us make use of that; let us devote our money and exert our energy in that direction and once and forever stop going down to Ottawa with our hats off in a deferential attitude before Minister this or Minister that, asking for something most politely and respectfully which will never be given us as long as we live. (Applause.)

There being no further discussion, the clause was adopted.

Mr. Rogers read clauses *re* "Eight Hour Day," "Merchants' Shipping Act," "Lemieux Act," "United States Silver," "Ottawa Representative," "Measurement of Water Flow and Rain Fall," "Commercial Travellers' Taxes," "Ontario Legislation," "Joint Stock Company Act," and "Ontario Assessment Act," which were adopted witohut discussion.

Mr. Rogers read clause *re* "Ontario Bureau of Labor."

Mr. J. O. Thorn.—In connection with this I would like to draw atention to the fact that the Trades and Labor Congress at its recent meeting in Winnipeg instructed its representatives in this Province to appear before the Ontario Government to urge the passing of a law compelling manufacturers to give this information. If such a law were passed, in my opinion you might as well give the Labor Unions your balance sheets at once, because it is quite equal to doing that to give the information which they have been asking us for, and which they are now trying to get the Government to compel us to give.

Mr. W. H. Rowley.—I would like to ask Mr. Rogers, through you, Mr. President, whether the Committee has considered the advisability of the Manufacturers having a list and interchanging and exchanging among themselves by card system, a register of those of their employees who have left them, either left of their own accord or been discharged or have otherwise been removed because they have been turbulent or disturbing; and whether it would or would not be, in the

opinion of the Association or of this Committee, a good plan to have such a system by which the names of the men who had been employed might be kept tab of, and other employers of similar labor kept advised.

Mr. Rogers.—I might say in reply to Mr. Rowley's enquiry that that question has not been before our Committee.

The President.—It is one which would have to be taken up and considered very carefully, and it is one which should really go before the Council of the Association to be dealt with. You might undertake that at some time.

Mr. Rowley.—Thank you. It ought to be considered, I think.

There being no further discussion the clause was adopted.

Mr. Rogers read clause *re* "Factory Inspectors."

Mr. C. R. McCullough.—Mr. Chairman and Gentlemen.—I happened to be a member of the small committee that waited upon the Minister having this matter in charge, some few months ago, and we were listened to very respectfully for the period of half an hour, and we rather felt we were making some progress with the Minister, but as he rose to bid us good day and on his walk to the door to let us out he very ingenuously remarked that the whole matter had been decided as to the appointment of these inspectors. We had urged upon him the desirability of choosing as inspectors men who neither represented the manufacturers nor were active agitators amongst the labor classes. He quite agreed with us in this; we tried to put it on a national ground, and we felt, as I said before, we were making progress, but when he stated that they had made their choice and we asked what the choice was, it was intimated to us in a very round-about way that they were to be selected from the laboring branch. We regretted that this was being done, but the remarks that have been made on this floor have simply demonstrated the fact that the manufacturers as a body are not considered by the Legislative bodies of this country; they do not amount to anything, and it is high time for this Association, if it is to do for itself what it ought to do, to rise with its arm not lifted too high, but high enough to indicate to the powers to which we go that we demand not only a hearing, but a careful consideration of our requests, and that the decision should be not a class decision, but it should be a decision consistent with the very best interests of the country. If we as a body demand that we be treated as a class organization we shall go to the extreme that the Labor Organizations have gone to, and the pendulum which has gone so far is, I am sure, about to swing back. We should not seek to hasten that pendulum in its swing to the other extreme. I think the Manufacturers are amongst the most liberally educated people of the country. We should therefore demonstrate to the citizens of Canada that we seek only that which is fair and which will build up the country and build it up permanently. This question of Inspectors is a small matter, perhaps, but it is one of those things that indicate the trend of feeling, and we ought to watch them most carefully, and this Committee is to be commended for taking this matter up and laying the facts as they have done before this body. I trust when the Manufacturers go to the Government at Ottawa or in Ontario or any other Province of the Dominion they shall go there and not seek as suppliants, but demand that they shall have what is eminently fair and right.

Mr. J. O. Thorn.—We have had a very good illustration quite recently in the City of Toronto of the objectionable features of having Labor Union officials as Factory Inspectors. There has been a strike amongst the machinists in this city—there is one on at the present time—and factory inspectors whom we had not seen for twelve months before came around very shortly after the strike was in operation. We naturally think, and I wish to say so without desiring to do any injustice to the factory inspectors, that if information as to the number of men working in our respective factories has not been conveyed, they are at least in a position whereby they can convey it, to the Labor Unions which are trying to work against us. It is exceedingly objectionable to have Labor Unions getting information about our factories from Inspectors in the employ of the Government, especially when they come to our factories when a strike is on, whereas we have not seen them for twelve months previously.

Mr. Ransford.—I think Mr. Thorn could tell us something about the number of men employed in the Labor Unions as compared with the number of voters.

The President.—That has already been done.

Mr. W. K. McNaught.—I would like to say a word in reference to what has been said in regard to the position of the Ontario Government as to Legislation. I think the members of the Committee will say so far as the Government of this Province is concerned that in the past few years they have been absolutely fair to the Manufacturers, and have not been biased or swayed unduly by the representatives of the Unions. The report itself, which has been read by the Chairman, I think bears me out fully in that respect.



Characteristic Poses

In so far as the appointment of Inspectors is concerned, I am not aware at the present moment that Inspectors have been appointed from Union men or that they have been appointed at all in fact; and, as I understand the matter, as yet no appointments have been made. I therefore think that some of the remarks which have fallen from previous speakers have been unfair to the Government of this Province; and as a member of the House I think it only fair to myself, as well as to the Government, to say that I think remarks of that kind should not be made in a public place in this way.

In regard to the report which has just been read, you will

find by going through it that reference is made to four or five different topics which have been before the Government of this Province for this Association, and in every case the action of the Government has been commended—that is, where they have taken action. If that is the case, I think the inference in regard to the factory inspectors allowed to be appointed is hardly warranted by the facts. That is my only reason for making these remarks at this time.

Mr. Rogers.—It would be most unjust if I should not corroborate what Mr. McNaught has said with regard to the generous treatment that has been given to matters that have come before the Committee—other matters I refer to—during the last year, and I think the members should know also that Mr. McNaught has been a most helpful member of the Association, in connection with other matters that are really of great importance to the Association.

Mr. George W. Walker.—Mr. President, I had the pleasure of being one of the Committee that waited on the Hon. Mr.



MR. ED. J. FREYSENG
(Freyseng Cork Co., Ltd,)
Chairman Toronto Branch, 1907-08

Monteith in regard to the factory inspectorship; and Minister Monteith, as Mr. McCullough has just told you, in dismissing us after the interview, intimated to us that the Labor Organizations of this country were very powerful and they must needs take cognizance of that fact. We presented to him a petition from the citizens of Hamilton, representing an investment there of over twenty-five millions of dollars, asking for the appointment as factory inspector of a man from the city of Hamilton, who does not belong to the Manufacturers' Association or to any Labor Organization, but who is a good mechanic. Mr. Monteith said, "Gentlemen, it is too late; we have practically made up our slip." We asked him if he would give us any further information as to who they would be. That is when he said they would have to take cognizance of the Labor Unions. We left there with our minds made up that they were going to appoint inspectors from the Labor Unions.

Mr. Rogers.—I understand these appointments have to be made by the Cabinet on the recommendation of the Minister, and so far as I know these names have not been presented yet, and it was thought there might be an opportunity of laying our views before the Minister or the Cabinet later.

Mr. McCullough.—The expressions which have been uttered here on the floor to-day may have influence upon the final appointment, and if it should be so I think the time we have occupied would be well spent.

Mr. Rogers. read clauses *re* "Pawn Brokers," and "Quebec Legislation," which were adopted without discussion.

Mr. Rogers read clause *re* "Metallic Roofing Company."

The President.—I do not think it is necessary to adopt that clause, but if you wish to make any remarks in reference to it, now is the time.

Mr. Rogers read clause *re* "The Union Label," and moved, seconded by Mr. G. Henderson, that the report be adopted as a whole.

Mr. Ransford.—I would beg to move in amendment, seconded by Mr. McGill, that in view of the indifference shown by the Government to the representations made by our representatives from time to time, the words on page 30 (of the printed reports), commencing, "The Association is already on record," etc., down to the words, "Building up our national industries," on page 31, be eliminated. You have already heard my views on this subject, and I only wish to say this, if that amendment is defeated, as it may be, if it has no other effect than calling the attention of the Government to the fact that we have got some life within us and some energy and some development policy and some power to act for ourselves, I shall be pleased.

The President.—You have heard the motion to adopt the report and you have also heard the amendment. Before it is declared open for discussion I wish to say a few words. I do not like to disagree with my good friend, Mr. Ransford, and in some respects he is perhaps correct in regard to this matter, but so far as the Canadian Manufacturers' Association is concerned, and so far as their influence with the Governments of this country is concerned, their influence is for good. We have accomplished much and we have been treated with respect, and we have been treated with dignity by all the Governments of Canada in so far as I know. We have been refused things, and we expect to be refused, because there are other people who consider and think entirely different to what we do ourselves. The questions of tariff and of labor are questions that are controversial, and when they are controversial there are two sides to the question. If the Government desires to consider differently to what we do we have to bow to their good judgment and bear it as best we can. But when we get into other matters, into matters of trade and commerce, the Government has lent to us a listening ear and it has helped us many times, and I desire to give it credit for that. When we get into these controversial subjects it is necessary for this Association to take one stand, and that is political or non-political. We are a non-political Association. If we desire to stand upon that platform we must take our rebuffs. If we desire to go into the political arena and declare ourselves as politicians, then we can say to the Government, "You must do this or do that or we are against you."

Mr. McGill.—In seconding Mr. Ransford's amendment, I don't think there is any politics in this matter whatever. This is a subject that has been before the Association for four or five years. We are all familiar with the fact that about four years ago the walls of Great Britain were placarded with notices that skilled mechanics were not wanted in Canada, or something to that effect. As Mr. Ransford has said, this resolution has been passed year after year without any apparent notice being taken of it. The amendment, as I understand, is simply to eliminate this resolution

and simply state our case in our report. For that reason I am quite pleased to second the amendment.

Mr. Rogers.—I am not quite sure if I fully understand Mr. Ransford's amendment.

The President.—It is just to eliminate the whole of that resolution.

Mr. Ransford.—It is merely to eliminate your reference to that motion which we have already passed. You distinctly say it is only a reaffirmation. We have already done it year after year. It begins with the words, "The Association," on page 30, and ends with the words, "National industries," on page 31. I desire that all of that be cut out, because we have already done that, and I do not want to keep on doing what is useless.

Mr. Rogers.—I think Mr. Ransford is under a misapprehension with regard to the meaning of this resolution. This resolution was framed by the present Parliamentary Committee during the present year, and was passed on to the Executive Council and approved of by them and sent to the Government. I believe Mr. Ransford is a member of the Council, and as I understand we are simply reporting what we have done as the Parliamentary Committee. We are now asking the Convention, as a Convention, to approve of the action of the Council and of the Parliamentary Committe. If Mr. Ransford has something further to insert in the report which would express his ideas better, something of that kind could be done, but why should we eliminate this action which we have already taken as an Executive Council and Parliamentary Committee?

The President.—Possibly you didn't understand that, Mr. Ransford?

Mr. Ransford.—I did not.

The President.—It has been passed by the Council and it is simply being reported on to the Convention.

Mr. Ransford.—If the Council did pass it they did what in their wisdom seemed best. We now as a Convention meet and express our conviction, and I for one member of this Convention would be averse to repeating that action of the Council. What we may say in Convention would certainly have more influence and weight than merely the action of the Council; and as a member of this Convention I would be averse to this Association taking that action and respectfully urging the Dominion Government, a thing I am sick and tired of doing.

Mr. Rogers.—Do I understand Mr. Ransford's amendment to be that this resolution should not be forwarded again to the Government?

The President.—He wants to eliminate this from the report.

Mr. Rogers.—If that is the wish of the meeting could that wish not be reached by simply changing the preliminary wording and not forwarding it to the Government; that is, not reaffirming it any further than in the acceptance of this report?

Mr. Ransford.—Yes, I will agree to that if my seconder will.

The President.—Do you withdraw your amendment if that change is made?

Mr. Ransford.—I do.

The President.—Then the original motion stands. Are you ready for the adoption of the Parliamentary Committee's report? If there are any other remarks on the report we shall be glad to have them, but I think it has been pretty fully discussed.

Mr. McNaught.—Before you put that resolution I wish to draw attention to the last clause which refers to the Workmen's Compensation Bill. I think that was brought up last session in the Legislature of this Province, and was sent over till the coming year. In my opinion that is one of the most far-reaching and important bills this Association will have to consider for a long time to come. A preliminary Bill has been brought into the House, founded on the English Bill, which went into operation last July, and I think every manufacturer who studies that Bill will come to the same conclusion as the English manufacturer has done since it came in operation, that it is a very hazardous bill indeed, and one which has worked a hardship on the manufacturer and on the public generally. If any bill is passed in the House here on the lines laid down in Great Britain, you will find that no matter how an accident occurs in your factory you will be held liable for it. I think that in this case we should take time by the forelock. This Association should put itself on record in regard to what it desires from the Government and take steps to deal with the matter properly when the Bill is brought before the Government.



MR. S. W. EWING
(S. H. Ewing & Sons)
Chairman Montreal Branch, 1907-08

The President.—That will be a matter which the Parliamentary Committee will deal with in due course.

The President put the motion to adopt the report, which, on a vote having been taken, was declared carried.

The Secretary made the announcements.

Mr. Thorn.—I would suggest that any member having a resolution to move should be given an opportunity to appear before the Resolutions Committee.

The President.—I don't think there would be any objection to that, but as far as the consideration of the resolution is concerned I think that should be a matter for the Committee itself to decide.

It is necessary that scrutineers be appointed for the counting of the ballots. This is a matter that takes a good deal of time, and possibly the gentlemen here would not care to be the scrutineers themselves; if not the office staff of the Association are at your disposal, the same as they have been in previous years. If you would like the office staff to take charge of the matter, you might appoint them, or else select members from this body.

Mr. Rowley moved, duly seconded, that the same scrutineers be appointed as last year.

The President put the motion, which, on a vote having been taken, was declared carried.

The President called on Mr. Sam Harris to address the Convention.

ORGANIZATION OF EMPLOYERS.

Mr. Harris.—Mr. Chairman and gentlemen, this is a little innovation not mentioned in the programme. I am speaking at the suggestion of some of the Toronto members, who are



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members not only of the Canadian Manufacturers' Association, but also of the Employers' Association. It was thought by some of them that it would be wise, when there was a large convention of this kind assembled, to place before those present, particularly the outside members, the fact that there is such an organization as an Employers' Association in Canada. I believe the one in Toronto at the present time is the only one in Canada. We thought it advisable to tell the Association why it was formed and for what purpose. Our esteemed President, Mr. Thomas Roden, was expected to speak to you, but at the last moment he was called away on a pressing engagement, so that it devolves upon me to do the best I can.

The Manufacturers' Association and the Employers' Association in some ways run together. In Legislative matters the two Associations work in harmony, and in many things they have, as the Parliamentary Committee's report has stated, accomplished much good. But when it comes to a strike, when it comes to a crucial part of a labor dispute, any one of you, if you have ever gone through such an experience, will know how necessary is co-operation. Then the Employers' Association comes in; it goes farther than the Manufacturers' Association, inasmuch as it embraces all the employers of labor. It does not leave any poor fellow out to bear the brunt of the attack; it takes him in hand and, if he wants to act fairly, he will be helped. We do not encourage a man to pay big dividends and keep his men on small wages. We have no desire to do that and would not tolerate it for a moment. In this I speak for the officers and members of the Association. My object in bringing the subject of the Employers' Association before you is to direct your attention to this means of safeguarding your interests during times of labor unrest. Toronto employers have been face to face with troubles already. The same condition is spreading to every industrial centre in the country. You will have trouble. Make your preparations now.

I just wish to read a little extract from the Toronto Star. I want to show you that the tyranny of organized labor is coming your way. It says here that "the Toronto Manufacturers frequently urge that one of the chief reasons why they cannot afford to pay the high wages demanded by the Labor Unions of this city is the fact they have to compete with manufacturers in towns in other parts of the country where there are no unions, but present indications are that it will be but a short time before the city manufacturers will have to find a new set of arguments in dealing with the demands of local unions. In all parts of the Province the organizer is at work, or, rather, organizers, for a number of them are on the road." So that he will come your way about the time you are not looking for him.

The Employers' Association of Toronto was organized in Toronto in 1902. It was called into existence by the tyranny of the times in which employers were afraid to combat labor. At that time Mr. J. P. Murray, a member of both organization, invited a number of gentlemen to meet him at Webb's, and by some mischance, or through the persevering attempts of the Press representatives, the names of the firms were published, and it so affected some of them that they wrote the Press stating that they were not in sympathy with the movement, nor had they joined. However, the Association went on and prospered. At that time the leaders of the Labor Organizations used to pick out the prominent men of the Employers' Association and give them trouble. For instance, they picked out Mr. Dixon, of the Dixon Carriage Company, and struck for no other reason than that he was a member of the Organization, and they gave him a pretty bad time; but that was their first defeat, and it must have been at that time a very very strange sensation, and a hard bump, for they had not known defeat for a long time. Since then the Employers' Association has taken part in almost every labor trouble. If the employers were not in at the time they came in after the strike started. We have also arbitrated several troubles and have adjusted a number of things in co-operation with the Manufacturers' Association. With the latter Association we opposed the Union Label Bill and the Stationary Engineers' Bill. The Association does not act on the aggressive. Its object is the equitable settlement of such disputes as are forced upon its members. In this work it advises employers outside of Toronto to join by the organization of similar associations.

FORESTRATION.

The President called upon Dr. Fernow, Dean of the Faculty of Forestry in the University of Toronto, to address the Convention on the subject of "Forestration." The address, which is published in full in another part of INDUSTRIAL CANADA, was listened to with great attention and interest.

Mr. W. H. Rowley.—Mr. Chairman, I beg leave to move, seconded by the Hon. J. D. Rolland, that the thanks of this Association are due and are hereby tendered to Dr. Fernow, for the full and exhaustive paper he has just read on the very important subject of the Forestry of Canada, and that the paper be printed and published in INDUSTRIAL CANADA among the records of the proceedings of this Convention of the Canadian Manufacturers' Association.

I will not speak to the motion because that portion of it which appeals more particularly to manufacturers of lumber, pulp and paper, among whom I am included, and in which my seconder is also very much interested, is so exhaustive that I would be taking up too much time were I to discuss it, but I should like to have an oportunity of talking the matter over a little and elaborating it at some other time.

Dr. Foster.—Might I suggest that a copy of the paper be sent to all the Provincial Governments, and also to the Dominion Government?

Hon. J. D. Rolland.—In seconding this vote of thanks I might say I have always taken a great deal of interest in this subject of "Forestry." Reforestration is a matter for the Government to deal with. We cannot count on lumbermen and settlers protecting the forest. The settlers want to clear off the forest so that they may have the use of the land, so that we must not expect anything from the settler or the lumberman in the line of the preservation of our forests.

The preservation of our forests will also protect our water powers. If the Government does not take up this question of the preservation of our forests, the water powers in years to come, which furnish such cheap power at the present time, will have disappeared. Therefore, it is with pleasure that I second the motion of my friend, Mr. Rowley, and with his consent we will add to the motion the suggestion made by Dr. Foster that a copy of the paper be sent to the different Provincial Governments and to the Dominion Government.

The President put the motion, which, on a vote having been taken, was declared carried.

The President.—I have much pleasure in tendering you a hearty vote of thanks, Dr. Fernow. (Applause.)

The President.—We will now proceed with the Insurance Committee's report, which will be presented by Mr. W. B. Tindall.

Mr. Tindall presented and read the report of the Committee on Insurance.

REPORT OF THE INSURANCE COMMITTEE.

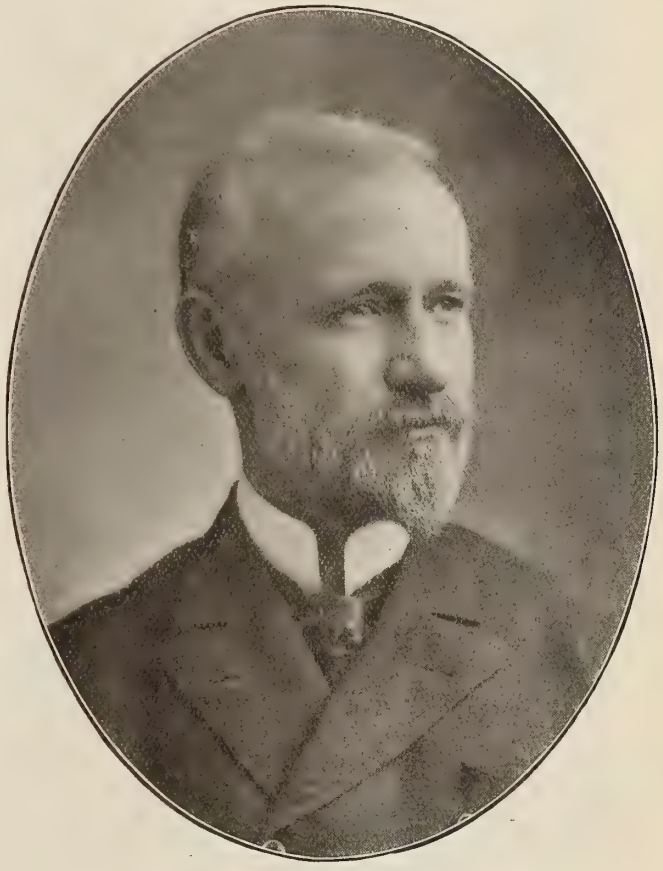
During the year the time of the Insurance Department has largely been taken up with the organization of the

MUTUAL FIRE INSURANCE COMPANIES,

which, prior to the last convention, had received the unanimous approval of the Executive Council, and which were enthusiastically endorsed at the special meeting of subscribers held in Winnipeg on the 17th of September last.

In view of the great importance of this movement to the membership of the Association as a whole, of the time and energy expended in its development, and of the serious opposition offered by the stock companies and their agents throughout the Dominion to the plans formulated by the Committee, it it fitting that we should now place on record circumstances and events that have played important parts in the work we have undertaken.

To fully appreciate the situation, it must be borne in mind that we have been promoting an entirely new departure in the Canadian fire insurance field, for up to this time there has been neither legislation nor precedent established by the Dominion Government on the subject of strictly mutual fire insurance companies, let alone of such companies by and for manufacturers only. It is almost incredible that after more than seventy years of most successful operation of such companies in the United States, with a development in recent years far outstripping the normal growth of the business of the stock companies, there should have been a total absence of all effort to introduce a similar system into the Dominion. While this is unfortunately true, the practice is not by any means



MR. W. B. TINDALL
(Parry Sound Lumber Co., Ltd.)
Chairman Insurance Committee, 1906-'07

unknown or unpopular here, for the Mutual fire insurance companies of the United States have a firm grip upon a very large amount of the best and most desirable insurance business of this country. The first step towards inaugurating the system under Dominion authority was, however, only taken when, as a result of the full and comprehensive investigation of the department, there was laid before Parliament the bills for the incorporation of the Eastern Canada and Central Canada companies.

It is little wonder, therefore, that the task undertaken caused the expenditure of more time than was anticipated, or that the stock companies, already in undisputed possession of the field, should vigorously and persistently oppose the organization of companies in Canada similar to those which have so materially and beneficially affected the manufacturing interests on the other side.

Postponement of Legislation Amending the Dominion Insurance Act.

At the last convention it was pointed out that the Dominion Act was silent on the question of the organization of mutual fire insurance companies, and a resolution was adopted requesting the Executive Committee, through the Insurance Committee, to "make every effort to have the Act amended at the ensuing session of Parliament, so as to permit the licensing of such companies without a deposit with the Government, but under conditions that will ensure safety in administration and in the security offered to policyholders."

The Executive Council at its November session confirmed this resolution, on the express understanding that the entire expenses incurred should be borne by the companies, when organized, and appointed a strong deputation to wait on the Government in furtherance of the views expressed therein.

Pending the reception of the report of the Royal Commission on life insurance, the Minister of Finance found himself entirely unable to say whether the Insurance Act would be



MAJOR T. S. HETHERINGTON
Chai man Quebec Branch, 1907-08

amended or not at that session of Parliament, and, therefore, suggested that it would be better to postpone hearing our deputation until it was decided whether the revision of the Act would be reached or postponed.

Meanwhile, we were face to face with the serious dilemma that by the rules of Parliament all private bills must be introduced into the House not later than an appointed day in December, and if we decided to defer the presentation of our bills until the interview with the Government had taken place, we should be too late to secure legislation until another session of Parliament, entailing the loss of a year in our work. On the other hand, if our bils were presented prior to the interview, we should necessarily have to stand our chance of obtaining from the House terms less onerous than those prescribed in the Insurance Act, as applicable to Canadian companies.

The serious problem thus facing us was carefully and thoroughly considered by the Committee, with the result that it was decided to put ourselves in order by the presentation of our bills of incorporation in regular form, and this was accordingly done.

Through the courtesy of the Minister of Finance, and the chairman of the Private Bills Committee, our bills were allowed to remain in suspense until the latter part of February, when the condition of the business of the session necessitated that they should either be dropped or proceeded with. By this time it was apparent there would be no legislation amending the Insurance Act at this session, and we were again face to face with the same problem we had previously met.

The Committee, therefore, decided to interview the Minister of Finance in the interest of our bills, and while we had a cordial, we had not a very sympathetic hearing, but we received enough encouragement to warrant us in reaching the conclusion that we had better allow the Private Bills Committee to pass upon the measures.

It is not necessary that we should go into any details of the most strenuous opposition that was offered by the stock companies, or of the attitude of the responsible Minister, suffice it to say that our bills, as amended by the Insurance Superintendent, went through, with the further provision that each company must, before the issue of the licenses, put up with the Receiver-General a deposit of fifty thousand dollars in approved securities. The addition of this provision was opposed as strongly as possible, and it was only incorporated after a very close vote of the Committee. As thus amended the Acts of Incorporation received the Royal assent on the 27th of April, 1907.

Shall the Charters of the Two Companies, as Amended by the Government, be Utilized or Dropped?

The vital question had now to be considered whether the imposition of the "deposit" by the Government had rendered the companies unworkable, or whether a practicable scheme could be evolved that would permit the completion of the organizations. It is needless to say that this question engaged the most serious consideration of the Committee. It realized in a manner that cannot be adequately expressed the seriousness of the task that was before them, yet it was felt if the members of the Association were in earnest in desiring the inauguration of a system that had proved itself of immense value to the manufacturers of the United States, and indirectly of Canada, too, the provision required to be made to meet the "deposit" should not be an insurmountable difficulty. The very fact that the stock companies had presented such a formidable and persistent opposition plainly evidenced their strong desire to kill the system at the start, and equally as plainly indicated to your Committee that such an opposition would not have been offered if their plans had not been meritorious and capable of devlopment in the interest of our members.

After the most careful consideration by the provisional directors of both companies in Toronto and Montreal, a plan was decided upon, and afterwards approved by the Insurance Committee and by the Executive Council at its June session. It is not necessary that time should now be taken to refer to the plan in its various details, particularly as the members have been fully informed thereon by letter and pamphlet. Suffice it to say that the plan involved the definite promise by members of the Association of four million dollars of insurance in each company, a task the magnitude of which can only be appreciated when it is remembered that this meant the active present co-operation of 700 members, covering 800 risks of $5,000 each.

Canvass of Members.

The Executive Council has from time to time agreed to advance the funds to enable a canvass to be made, as far as practicable, of all members of the Association. In the month of June, Mr. B. L. Anderson was temporarily transferred from INDUSTRIAL CANADA, through the courtesy of that Committee,

for the ensuing three months, and since the beginning of July three others have been employed on a similar mission.

Results of Canvass.

The results of the canvass just referred to have exceeded the most sanguine expectations of the Committee, who are now glad to announce that the task they assumed, great as it was, has been practicaly completed, and applications are now in the hands of the Superintendent of Insurance at Ottawa for the issue of the licenses. That this really serious undertaking has been brought to a successful close within the short space of three and a half months is, in the opinion of the Committee, not only ample justification of the course they have pursued, but is a standing testimony to the energy of the department officers.

Permanent Organization.

Much, of course, requires to be done to get the companies in shape for business after the licenses have been granted, but we are glad to say arrangements have been entered into by which all that remains to be done will be assumed by the directors of the companies, who have completed arrangements for this purpose. It is expected definite announcements will be sent out by them within a few days, as to the date upon which business will be commenced.

Expenses of Preliminary Organization.

As already explained, the outlay of the Association, whatever it may be found it has amounted to, will be recouped when the mutual companies start business, and it is safe to say that no mutual companies will have started under more favorable auspices, or have organized at less cost, than those which your Committee have brought to the condition in which they can now safely leave them.

Association's Representative on Boards of Directors.

Under the provision of the company's charters the Canadian Manufacturers' Association has the right to nominate one director on the Board of each of the companies, and your Committee now recomends that you appoint the manager of the Insurance Department, Mr. E. P. Heaton, to this office. In this way the Insurance Department will be able to constantly watch the proceedings, and see that the policy of the companies continues to warrant the support and endorsement of the Association.

Work of the Department for the Year.

Notwithstanding the encroachment upon the manager's time, in the work incidental to the organization of the mutual companies, the department has had a busy and successful year, as the following reports indicate :

	No. of Risks.	Amount of Insurance.
Policies examined	93	$5,408,983
Risks inspected	38	2,797,800
	131	$8,206,783

	No.	Amount.
Losses adjusted	7	$98,302.81

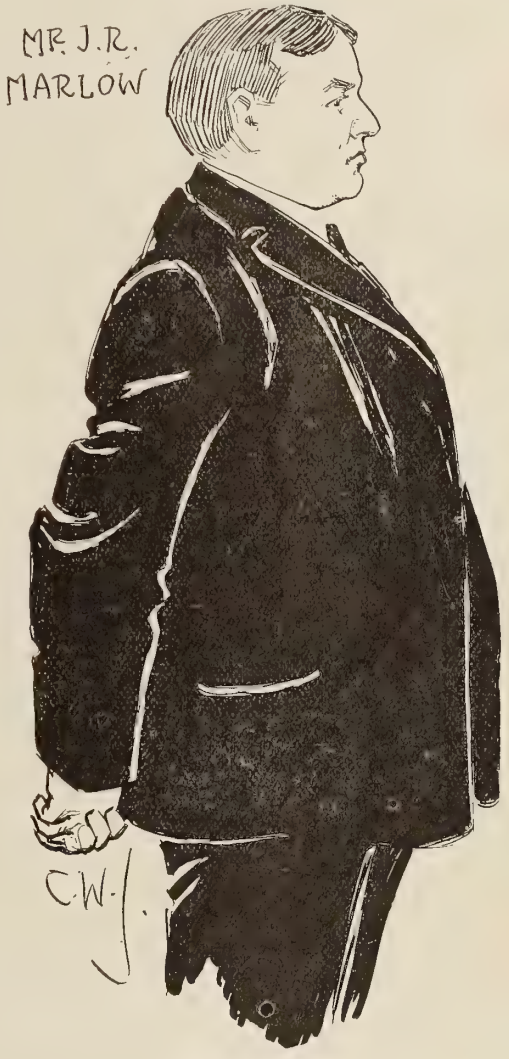
Since organization on February 1st, 1905, the record of the department in respect of these items is as follows :

	No of Risks.	Amount of Insurance.
Policies examined	200	$16,160,257
Risks inspected	202	12,504,314
	402	$28,664,571

Losses adjusted, 14, amounting to.....$166,176.81

It must be borne in mind that the gross total of $28,664,571 is of insurance for the current year in which the risk was dealt with, and to ascertain the aggregate amount of insurance for the two and one-half years in which the department has been in existence the amount should, at least, be doubled; in other words, the total insurance that has passed through our office since its inception may, on a conservative estimate, be stated at $50,000,000. At the average rate shown by the Government Blue Book to be paid to all companies, viz., 1.65 per cent., this insurance represents premium payments to the companies of $825,000. The aggregate claims made on the companies in respect of this large business in the period of two and one-half years, has been $17,900.

As stated in our last report, we are not disposed to build any theory upon this somewhat remarkable showing, but are satisfied to record it as evidencing the fact that the members who have utilized the services of the department have contributed enormously to the profits the companies have derived from the entire Canadian fire insurance operations of the same period.



Characteristic Poses

We shall not attempt to make any summary of the department's work in the matter of advice on building construction, the supervision of plans and specifications therefor, private fire protection, automatic sprinkler equipments, improvements in risks, etc. In all these features there has been a growing disposition to make full use of the department, and we are certainly encouraged to believe that we are entering upon a period of increased usefulness and benefit to the members.

Change of Policy in Work of Department.

At the March Executive Council, your Committee presented a report recommending that the work of the department should be extended and developed along the following lines :

(*a*) Examination of policies.

(*b*) General expert advice and assistance.

(*c*) The protection of risks by modern fire fighting appliances, including automatic sprinkler installations.

(*d*) Adjustment of fire losses.

(*e*) Development of mutual insurance plans.

They pointed out that the department could do much more effective work for the members generally if the creation of a revenue by means of commission on business placed was not necessary, and more time given to the work above outlined. The Council approved the recommendation of the Committee, and a pamphlet was accordingly sent to each member announcing the change, and recording clearly the charges that would be made in connection with each branch of the work.

The increasing proportion of revenue derived from "fees," as thus recorded, affords reasonably good grounds for believing that the new policy will be attended by correspondingly favorable results, although, as pointed out in the report to the Council, it will take some time for the department to adjust itself to the altered circumstances, and to bring the revenue to a figure approximating the expenses. Since the issue of the pamphlet to the members the Committee has had ample proof that the change in policy will materially increase the opportunities for effective service to a much larger number of the members than was possible on the lines upon which the department was inaugurated.

Finances.

During the year the Treasurer has paid on account of the department the sum of $5,490.82, and there was received by him from the department the sum of $2,887.04, showing a deficiency of $2,603.78. The actual disbursements on account of the mutual companies has been $1,351.94, showing a net deficiency in the ordinary revenue of the department of $1,251.84.

At various meetings of the Council the Treasurer has presented the condition of the finances of the department, and money has been voted to provide for its needs. Your Committee think the time has now arrived when the Finance Committee should be empowered to treat the Insurance Department in the same manner as it treats other departments, without having to go to the Council for specific authority to cover an overdraft, or to make appropriation to meet anticipated needs.

This point was raised at the last convention, and a recommendation adopted which was intended to depute to the Finance Committee the desired authority. In view of the fact that the recommendation referred to does not seem to have been made sufficiently clear, it is now recommended that the Association, in annual meeting, authorize the continuance of the Insurance Department, under plans to be approved by the Executive from time to time, and that the Finance Committee be empowered to pay all expenditure incurred by the department under plans so approved.

All of which is respectfully submitted.

W. B. TINDALL, *Chairman.*

G. M. MURRAY, *Secretary.* E. P. HEATON, *Manager Insurance Department.*

Mr. Tindall moved the adoption of the report.

Mr. Burton.—Mr. President, I would like to say a few words in seconding the adoption of the report. The work of this Association follows the Swiss motto of, "Each for all and all for each"; that is to say that in an Association of this kind we try to benefit everybody and that everybody should try to benefit the Association, and if we do not all of us get exactly what we want and what is suited to our individual cases, that does not relieve us of the responsibility of doing all we can in the way of pushing forward what is considered best.

With regard to the benefits of co-operation, I need not speak. We know very well how we have benefited here in the matter of transportation from the Transportation Department. It was only the other day that I had the pleasure of reading in a Manchester paper a very appreciative article of what had been done by the Canadian Manufacturers' Association in getting the way bills made out in such a way that the responsibility of the railways would be put just about where it should be.

Now, this question of insurance is a thing that affects everybody. There is not one in the Association who is not affected. The policy of the old line companies has not been towards the prevention of fires, but towards the collection of the largest amount of money that could be got for what they gave. I don't know whether all the gentlemen here have taken notice of the fact which has been published in INDUSTRIAL CANADA that taking the years 1904, 1905 and 1906 together—and 1904 was the year of the Toronto conflagration—that taking the three years together the companies doing business in Canada, the Canadian, British and American, have made after all over three million dollars in the three years, which shows very clearly they have been making a very decent profit, and also shows very clearly that there is room for insurance to be done on a much more economical foundation than it has been done; and this we think we can do, because if we follow the lines of the mutuals in New England we shall be aiming to prevent fires, not merely to pay for them after they occur.

Might I say one or two things that have occurred in my own experience, being one of the unfortunates who have been burned out. The manager of one insurance company called me up and wanted to know if a certain young fellow connected with an insurance company had been recommending a sprinkler system; as if it was a crime for a young fellow connected with an insurance company to advise a man to put in sprinklers as a preventative measure. Another man, the manager of another company, whose advice I asked about the best style of sprinkler to be used, told me that he thought so and so was pretty good, but it wasn't the business of the insurance people to say what plan should be adopted; their business was to sell insurance. It seems to me that although they are altering a little bit, which is perhaps partly due to some of the rubs they have been getting, yet the policy of the companies is not the policy which the mutuals want to establish, which is to prevent fires and not to bring them on.

Now, we want the help of every member of the Association. We have had a hard fight and we are having a bit of a hard fight now. It is very evident that the Department in Ottawa is going to demand the utmost of the pound of flesh, but we do not think as an Association we ought to be put down; we do not think we ought to turn tail and be defeated, and we do not intend to; but we want the support and co-operation of every member of the Association. I am pleased to say that the Montreal members have practically allowed us up here in Toronto *carte blanche* in the carrying on of the business here, that is, to make Toronto the Head Office; and it is only in accord with the liberal ideas of the Montreal people. I lived there for nineteen years and I have always had respect for the liberality and breadth of view of the Montreal men, and I take this opportunity of acknowledging the help we have always received from them. I would add that not the least of their work is the fact that it was they who sent us Mr. Heaton, to whose energetic

effort and thorough knowledge of the insurance question we are very largely indebted. I have very great pleasure in seconding the adoption of the report.

Mr. Rowley.—I would like to say, Mr. Chairman, that I understand one of the hardest and most difficult propositions that we are up against is the cash deposit. Am I right in that?

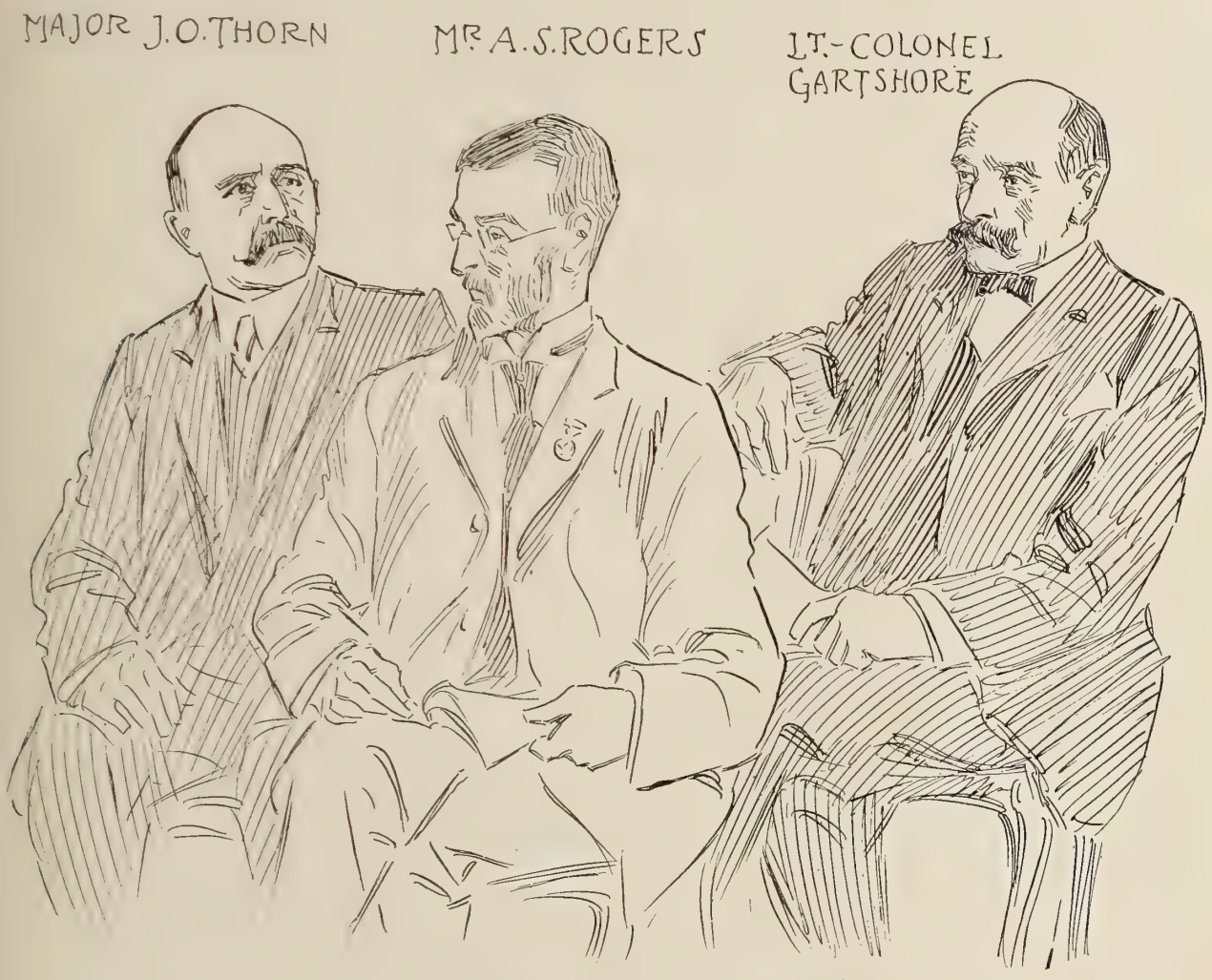
Mr. Burton.—Yes.

Mr. Rowley.—I think some one, perhaps the Chairman, might just say a word in explanation of what will be taken up in a circular letter that is to be sent to members asking

Mr. Tindall.—That would suit my views entirely. I don't know that I myself would make the explanation which Mr. Rowley asks, but I would certainly like to have the Manager of the Department given the opportunity of making the matter perfectly clear.

The President put the motion that the report as read be adopted, and that there be five or ten minutes devoted to the question at the afternoon session, which, on a vote having been taken, was declared carried.

The meeting adjourned at 12.45 p.m. to meet again at 2.15 o'clock p.m.



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that not only the fifteen per cent. that we have all agreed to pay within a certain time be paid at once, but that we also pay—those of us who can, and I fancy everyone can—the extra ten per cent. demanded by the Government. I am not on the Committee, but I am one of the directors of one of the companies. Unfortunately, I was not at the meeting yesterday, so that I cannot speak as fully or intelligently on this subject as I would like to do, but I would like to have the Chairman say a few words about it, so that those of us who are here will be ready for and be impressed by the letters that are coming out.

The President.—How would it be to adopt this report now and then have the Chairman address the meeting when more are present?

Mr. Rowley.—I cannot speak for the Chairman, but before the Chairman does speak, I would like to say that that would be splendid.

AFTERNOON SESSION.

At 2.30 o'clock p.m. the President took the chair and said: Gentlemen, if you will come to order we will proceed with business. The first thing on the programme this afternoon is the report of the Railway and Transportation Committee. Mr. Housser will present the report; it is very lengthy, and he will read a summary of it. You have the details before you.

The report in full is as follows:

REPORT OF RAILWAY AND TRANSPORTATION COMMITTEE.

Your Committee submits herewith its annual report relating to the operation of the Transportation Department.

It was decided at the outset that the greater interest of the Association for the present lay in disposing, as far as possible, of matters pending before the Board of Railway Com-

missioners for Canada, in which manufacturers were vitally interested. The result will be found in the general summary.

Other matters, as they presented themselves during the year, were promptly taken up, and either satisfactorily disposed of or are now pending before the Railway Commission or with the railways.

It has been the policy of the department to negotiate direct with the railways in all matters pertaining to transportation, appealing only to the Railway Commission when all other means of adjustment were exhausted.

The railways' traffic officials have shown their willingness to deal promptly with matters brought before them, recognizing, no doubt, that the Association is endeavoring to secure better co-operation between shippers and themselves, and that through the organization of the Association differences can be adjusted much more expeditiously than by dealing with the individual shipping interests.

Your Committee takes this opportunity of recognizing the courteous treatment extended to it and the department by the Railway Commission and its officials during the year.

In this connection we are of the opinion that the work of the Commissioners has become so onerous, in view of the increased duties imposed upon them by Parliament, that the Association should go on record in support of such reorganization as would help to divide and specialize their work. A resolution to that effect will be submitted for the approval of the Association.

The department continues to render valuable assistance to individual members in the settlement of claims and in negotiating their differences with the railway companies. Difficulties in regard to freight rates and classification have been removed. Numerous enquiries have been received from members during the year relating to transportation matters, all of which have received prompt attention.

Your Committee announce the resignation of Mr. J. R. Marlow, Manager of the Department, during the year. Although Mr. Marlow's resignation took effect December 31st, 1906, he continued connected with the department during the month of January, assisting his successor, Mr. J. E. Walsh, in reviewing the work, more particularly those matters which had not been closed. Since then Mr. Marlow has served on the Committee, rendering valuable services to it and the department.

The following is a general summary of matters dealt with during the year :

Freight Classification.

The revision of the Canadian Freight Classification, referred to in the last annual report, has been completed and it became effective September 1st by order of the Railway Commission. It supersedes all previous classifications and amendments thereto. There has been no previous revision of the classification since 1903, although various amendments have been made since that date as a result of negotiations with the railways and representations to the Railway Commission by the department, all of which are embodied in the new book.

Chief among the important changes which necessitated the revision of the classification was Rule 7 of the rules and conditions of carriage, which deals with articles classified to be carried at owner's risk.

The old rule read as follows :

"Articles marked at 'O. R.' must be so receipted for by agents, and the words 'owner's risk' written in full on the shipping notes and receipts.

"Articles marked 'Released' must also be so receipted for and shippers or owners must duly execute a release in duplicate on the company's forms."

The conditions practically meant release from damage from any cause whatsoever, the carriers being relieved from liability even through negligence.

Rule 7, as amended in the new classification, is as follows:

Articles at Owner's Risk.

"Articles by the classification shown as to be carried at owner's risk of weather (*i.e.*, O. R. W.), of breakage (*i.e.*, O. R. B.), or otherwise, as the case may be, shall, unless otherwise required by the shipper, be carried at owner's risk as so specified and defined, and no special notation to that effect shall be necessary on the bill of lading."

"Should the shipper decline to ship at owner's risk (as specified and defined in this classification), any article shown as to be so carried, he may ship them, subject to the terms and conditions of the bill of lading, approved by the Board of Railway Commissioners, in which case twenty-five per cent. over and above the rates which would be payable if such articles were shipped at owner's risk will be charged.

"These conditions are intended to cover risks necessarily incidental to transportation, but no such limitation, expressed or otherwise, shall relieve the carrier from liability for any loss or damage which may result from any negligence or omission of the company, its agents or employees."

Wherever the owner's risk condition is left in the classification it is defined as follows :

O.R.B., Owner's Risk of Breakage.
O.R.C., Owner's Risk of Chafing.
O.R.D., Owner's Risk of Damage.
O.R. Det., Owner's Risk of Deterioration.
O.R.F., Owner's Risk of Fire.
O.R. Lkge., Owner's Risk of Leakage.
O.R.S., Owner's Risk of Sifting.
O.R.W., Owner's Risk of Weather.

The old classification stipulated that if a shipper of goods, for which a rating was provided at owner's risk, desired to have them sent at carrier's risk, he would have to pay an advance of 50 per cent.

The new classification, it will be observed, provides for an advance of 25 per cent., making the increased charge for transportation at carrier's risk only about one class higher than if carried at owner's risk .

The more important features of this revised classification are that some two hundred and forty commodities, which have been hitherto carried at the risk of the owner, will hereafter be carried at the carrier's risk, without any advance in the ratings, and that on those articles which will still be carried at the risk of the owner the risk is specified and restricted.

The release which was formerly exacted on shipments of furniture and similar commodities has been done away with.

The railways, in submitting the classification to the Commission for approval, proposed a change in the minimum weight of mixed carload shipments between points east of Port Arthur, as provided for in Rule 2, Section B, which would have resulted in an increase in the minimum weight. This was disallowed.

It was also proposed by the railways to omit the reduced ratings on stoves that are returned to shipper after having served their purpose, for the protection from frost of perishable shipments. This was also disallowed.

The classification has been rearranged, and as far as possible articles classified under their proper headings, so that it will be more easily understood by shippers.

Individual Reductions in Classification.

During the year a number of changes and reductions have been made, in which the department took an active part. Some of the important ones are :

Stoves.

There has been a general revision of the ratings on stoves and parts thereof (including castings), furnaces, heaters, etc.,

in which the third-class rating is given for stoves in less than carloads, when crated. In many instances the ratings have been reduced from one to two classes.

Furniture.

Rating for lounges, back and legs off, l.c.l., reduced from first and a half-class to first-class.

Bureaus, wardrobes, washstands, dressing cases and sideboards, knocked down, reduced from first to second class.

Revision of minimum weights to Pacific Coast terminals in carloads, resulting in the following reductions :

Cars 36 feet in length	$21 00
Cars 40 feet in length	35 50
Cars 42 feet in length	86 00
Cars 45 feet in length	20 50

Chair seats, perforated, crated or boxed, reduced from first to second class.

Children's Carriages.—A reduction from three times first-class to double first, and a change in the conditions of carriage. Heretofore in order to obtain the lower ratings the classification called for the removal of the handles. This has been amended to read " wheels off only."

Hardware.

Castor pins have been given a rating of third class, l.c.l., and 5th c.l., same as iron rivets, and may be mixed with articles in iron and steel list.

Curry combs, in boxes or barrels, have been given a rating of 2nd l.c.l., and 5th c.l., and added to the hardware list.

Meat and food choppers or cutters (hand), boxed, have been given a carload rating, and added to the hardware list. The amended classification reads l.c.l., 2nd, c.l., 5th class.

Refrigerators have been given a rating in and added to the hardware list.

Saddlery hardware, c.l., reduced from fourth to fifth class.

Miscellaneous.

Wall and counter show cases reduced from three times first-class to double first-class.

Wooden tanks, vats and cisterns, reduced from 5th to 6th class, carloads.

Proposed Advances Disallowed.

Some of the advances proposed by the railways in the ratings or conditions of carriage, which were amended, withdrawn or disallowed after action by the department, are :

Requiring bureaus, wardrobes, washstands, dressing cases, side boards, when enitrely taken apart, k.d., to be boxed. This item was amended to read " wrapped, crated or boxed."

Centre or extension tables, k.d., legs off, stipulating they should be crated or boxed. Amended to read, " Wrapped, crated or boxed."

Elimination of lawn or garden rollers from the agricultural implement list, and insertion of the same in the hardware list at fifth class, carloads. The proposition was withdrawn, leaving them in the agricultural implement list at same ratings. They were also added to the hardware list.

Packing, metallic and rubber, in boxes, l.c.l., second, and c.l., fourth, was amended to read " in boxes or bales."

Requiring electric storage batteries, in view of the elimination of the owner's risk condition, to be boxed, amended to read " crated or boxed." Same ratings.

Increase in rating on brushes, silver mounted, boxed, from 2nd to 1½ class, and on brushes, bristle or hair, boxed, from 2nd to 1st. Disallowed.

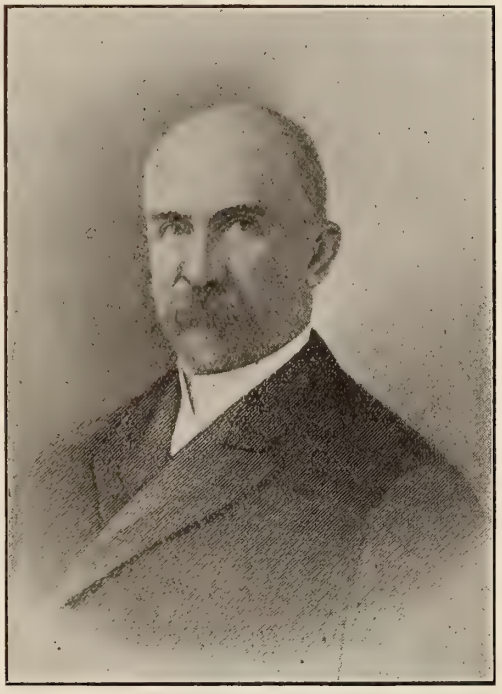
Increase in the minimum weight from 5,000 lbs. to 8,000 lbs., on large automobiles, s.u., or with wheels detached only ; also increasing the minimum carload weight from 10,000 lbs. to 14,000 lbs. on s.u., automobiles, with a counter proposition for a decrease in the rating from first-class to second class. Disallowed.

There are a number of changes and reductions now under consideration.

International Rate Case.

The long outstanding complaint that the railways discriminate in favor of through traffic from the United States, as compared with traffic originating on the Canadian side of the boundary, has at last been disposed of. The Railway Commission issued an order on July 6th, in which the Association, the complainants, were sustained at practically every point. The case was based primarily on the " long and short haul clause " of the Act. The result of the decision will have an important influence as it establishes the long and short haul principle of the Act. In this alone it may be considered one of the most important decisions yet given by the Commission.

On July 4th, 1906, the Secretary of the Commission issued



MR. J. H. HOUSSER
(Massey-Harris Co., Ltd.)
Chairman Railway and Transportation, 1906-07

a memorandum, in which the railways were given ninety days wherein to submit a scheme to the Board for its consideration.

It was clear that no attempt at harmonizing the rates would be satisfactory under two classifications, viz., the Official in the United States and the Canadian Classification in effect throughout the Dominion. As a result of meetings between the railways interested it was agreed to adopt the Canadian classification and Canadian tariff basis for their international traffic. The tariff basis, as well as the classification, are different on the two sides of the frontier.

The Canadian tariffs are built up on the fifth class, the fourth class being 25 per cent.; third class, 50 per cent.; second class, 75 per cent., and the first, 100 per cent. higher than the fifth. The basis is entirely different in Central Freight Association, United States territory, which is affected by the change. As an illustration : The rates from Detroit to Toronto, run from 5th, 13 cents, to 1st, 36 cents, at present. If they were based on the Canadian scale they would run from

13 cents to 26 cents. From Detroit to Montreal it would be from 5th, 23½ cents, to 1st, 47 cents, instead of from 23½ cents to 58½ cents as now, and similarly with all points in the United States to the Mississippi, and this would be an impossible adjustment from the standpoint of the United States railways. The alternative was to accept the present 1st class rates and scale down on the Canadian scale; and so far as Port Huron, Detroit and Buffalo are concerned this has been done.

The railway companies submitted their first draft scheme in response to the memorandum of the Commission on November 8th, 1906. A meeting for its consideration took place in December, at which the Manager of the Department considered the basis, as a whole, unsatisfactory. New tables were



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prepared, reaching the Committee on February 15th, 1907. The railways stated they had endeavored to evolve a plan whereby whatever scheme of adjustment was finally adopted would take care of the Toronto Board of Trade complaint, as well as that of the manufacturers. They pointed out that the adoption of the basis suggested at the Montreal conference would prove so disastrous that the officials of the Grand Trunk and Canadian Pacific Railways, who were chiefly interested, could not assume the responsibility for such a large loss of revenue. At the same time they recognized the authority of the Commission's orders, but in that case the Commission would have to assume the responsibility of the results.

The scheme was most elaborate and apparently involved a loss of revenue on the part of the Grand Trunk of from half a million to a million and three-quarter dollars annually. The Canadian Pacific alleged their loss would equal two-thirds that amount. Although it was conceded that these figures merely represented approximations (there had been no time for an audit), the Commission felt that in justice to the railways their statistics could not be ignored. It was also evident that an audit of the companies' books, in order to verify these statements, would postpone the decision of the Commission indefinitely.

It was evident to your Committee that whatever immediate readjustment could be arrived at would be a step in the right direction. An important factor in the proposition submitted was a revision of the general mileage basis, which would have a direct bearing on the discrepancies between the local tariffs, of which the Toronto Board of Trade complained, and bring about generally a reduction in freight rates throughout Eastern Canada. It was, therefore, suggested that a compromise might be arrived at for a tentative adjustment. A resolution was passed to that effect, and forwarded to the Railway Commission on March 25th last. It was set forth in the resolution that in petitioning the Commission it should be understood that the new rates would be considered experimental, and without prejudice to the rights of interested manufacturers or the Association to appeal against the new rates so proposed, or against the higher rates which then prevailed on east-bound traffic over those charged on west-bound traffic, and in no way to prejudice any complaints, such as that of the Toronto Board of Trade, or of this Association, or of any of its members now pending or to be submitted to the Board for ruling. It was further set forth in the resolution, namely :

A. There shall be no increase from United States frontier points, namely, Detroit, Port Huron and Buffalo, beyond those brought about by the classification scale.

B. Rates to be scaled down by groups from intermediate and branch line points, lined down in proportion with the new rates proposed from Sarnia, Detroit and Niagara.

C. Commodity tariffs to be issued, covering rates on commodities imported from the United States and used as raw materials by manufacturers on the basis of the present commodity rates, or if there be no commodity rates in effect, then commodity tariffs to be issued containing the present class rates.

D. There shall be no disturbance of any special commodity tariffs or commodity rates now in effect east-bound from Ontario points, where lower than the new class rates; such, for instance, as the application of the west-bound rates east-bound, as embodied in commodity tariffs now in effect from Ontario points to the East.

E. There shall be no interference with or advance in the present basis of rates from Montreal west-bound on the winter and summer scale.

This resulted in other tables being drawn up by the companies, having for their object the satisfactory solution of the manufacturers' and the Toronto Board of Trade cases. These proved impracticable. It became apparent that our case would have to be settled on its own merits, and on the basis outlined in our communication to the Commission. It was also apparent that the traffic officials hesitated to assume the responsibility of the reductions, and that the Commission would have to assume such responsibility. A final conference was held in Toronto on May 23rd, at which a scheme was practically adopted.

The order of the Commission states in part :

" That the special local class tariffs (known as town tariffs) of the Grand Trunk, the Canadian Pacific Railway, the Michigan Central, the Wabash, the Toronto, Hamilton and Buffalo, and the Canadian Northern Ontario Railway, east of the Detroit and St. Clair Rivers, Lake Huron and the Georgian Bay and North Bay (east and south-bound), and south of the Ottawa River, be reduced so as to place them on the same mileage scale, and that for this purpose the table of mileage rates, particularly set forth in the schedule hereto annexed marked " A," which is hereby made a part of this order, be adopted as the basis by the said companies.

The rates in all cases shall be based on the shortest workable mileage.

"That for the purpose of compilng special tariffs from points west of Toronto to points east thereof, the territory be divided into groups.

"Through rates from the aforesaid groups shall be reasonably graduated to points east of Toronto on the basis outlined at the Toronto conference May 23rd, 1907.

"That from points competitive with the lake and river lines the companies may publish such commodity rates as may be necessary to meet the competition of the water carriers.

"That the east-bound rates from the territory east of Toronto and Orillia, and east of and including Depot Harbor, Parry Sound and North Bay, be in accordance with the mileage scale referred to.

"That to points in Quebec, west and east of Hull, and east and south of Montreal, through rates from the groups defined be arrived at, in accordance with the reduced scale of arbitraries submitted.

"That no special commodity rates now existing, which may be lower than the corresponding class tariff rates herein prescribed, shall be advanced by reason of the changes herein ordered or without the sanction of the Commission.

"The said railway companies and connections are permitted to substitute the Canadian classification from Detroit and Port Huron, and from points west thereof, via the Detroit and St. Clair River crossings, and to scale the lower classes on the first-class rates now existing.

"That the rates from Canadian points on the Detroit and St. Clair River frontier to all points east to the Atlantic and north to the Ottawa River, shall in no case exceed the rates from Detroit and Port Huron as fixed.

"That in the adjustment of the international rates, the rates on raw materials from points in the United States to points in Canada, shall not be advanced at the instance direct or indirect of the companies operating in Canada."

The New Schedules.

From the group territory the present and proposed rates to Montreal in the first five classes are as follows. A corresponding reduction applies to all intermediate points :

	Present Winter.					Present Summer.					Proposed Winter and Summer.				
From	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Windsor, Chatham, Newburg, Sarnia, etc.	70	61	52	44	35	60	53	45	38	30	58	51	44	36	29
Strathroy	68	60	51	43	34	60	53	45	38	30	56	49	42	35	28
Glencoe, Komoka, Park Hill, London St. Thomas	68	60	51	43	34	58	51	44	36	29	56	49	42	35	28
St. Marys	66	57	49	41	33	56	49	42	35	28	54	47	41	34	27
Woodstock, Ingersoll, Tillsonburg, Stratford, Simcoe	64	56	48	40	32	56	49	42	35	28	52	46	39	33	26
Berlin, Galt, Paris, Brantford	60	52	45	37	30	50	44	38	31	25	50	44	38	31	25
Guelph	58	51	44	36	29	50	44	38	31	25	48	42	36	30	24
Hamilton	54	47	41	34	27	42	37	32	26	21	W 46 / S 42	40 / 37	35 / 32	29 / 26	23 / 21
Toronto	50	44	38	31	25	40	35	30	25	20	W 44 / S 40	39 / 35	33 / 30	28 / 25	22 / 20
Goderich, Collingwood	68	60	51	43	34	60	53	45	38	30	52	46	39	33	26
Mount Forest, Harriston, Palmerston	68	60	51	43	34	60	53	45	38	30	52	46	39	33	26
Orangeville	64	56	48	40	32	64	56	48	40	32	48	42	36	30	42

The following are examples of some of the present and proposed rates, subject to revision, based on the present Canadian scale :

	Present.					Proposed.				
	1	2	3	4	5	1	2	3	4	5
From Windsor to										
Whitby, Oshawa	44	39	33	28	22	40	35	30	25	20
Port Hope, Cobourg	46	40	35	29	23	42	37	32	26	21
Trenton, Belleville	48	42	36	30	24	44	39	33	28	22
Napanee	54	47	41	34	27	46	40	35	29	23
Kingston	54	47	41	34	27	48	42	36	30	24
Brockville	60	53	45	38	30	50	44	38	31	25
Prescott,	60	53	45	38	30	52	46	39	33	26
Cornwall	66	58	50	41	33	54	47	41	34	27
Collingwood, Orillia	50	44	38	31	25	42	37	32	26	21
Sherbrooke. Winter.	82	72	62	52	41	66	58	50	41	33
Sherbrooke. Summer	72	64	54	46	36					
Quebec. Winter.	84	73	64	53	42	68	59	51	42	34
Quebec. Summer	74	65	56	47	37					
Halifax	92	81	70	58	46	78	69	59	49	39
St. John	90	79	68	57	45	78	69	59	49	39
Sydney	100	88	76	63	50	86	75	65	54	43
From Chatham to										
Guelph	36	32	27	23	18	32	28	24	20	16
Toronto.	38	33	29	24	19	36	32	27	23	18
Kingston	54	47	41	34	27	48	42	36	30	24
From London to										
Hamilton	30	26	23	19	15	26	23	20	16	13
Toronto.	36	32	27	23	18	32	28	24	20	16
Collingwood.	38	33	29	24	19	34	30	26	21	17
From Hamilton to										
Toronto.	22	19	17	14	11	18	16	14	11	9
Berlin.	24	21	18	15	12	22	19	17	14	11
Woodstock	22	19	17	14	11	20	18	15	13	10
St. Thomas	30	26	23	19	15	26	23	20	16	13
Clinton	32	28	24	20	16	28	25	21	18	14
North Bay.	46	40	35	29	23	40	35	30	25	20
From Toronto to										
Berlin.	24	21	18	15	12	20	18	15	13	10
Guelph	28	21	18	15	12	20	18	15	13	10
Brantford	28	25	21	18	14	22	19	17	14	11
Woodstock	30	26	23	19	15	28	25	21	18	14
Ingersoll	32	28	24	20	16	28	25	21	18	14
Penetang	34	30	26	21	17	30	26	23	19	15
Goderich	36	32	27	23	18	32	28	24	20	16
Southampton	38	33	29	24	19	34	30	26	21	17
North Bay.	46	40	35	29	23	38	33	29	24	19
From Ottawa to										
Parry Sound.	68	60	51	43	34	42	37	32	26	21

The same scale will be used in revising the tariffs at the other comomn and distributing points.

The railways are busily engaged in the preparation of the new tariffs for submission to the Commission. It is not expected, however that they will become effective before the end of October.

Whilst the decision of the Commission establishes the long and short haul clause of the Act, and to a certain extent disposes of the discrimination complained of in east-bound traffic, it does not settle our contention for the application of the west-bound rates east-bound where lower, and that there should be a general reduction in what is known as the "standard mileage tariffs.' These matters are still under consideration.

Uniform Bill of Lading—General Terms and Conditions of Carriage.

Your Committee regret that they have been unable to report more progress in this important matter, especially as the Association has pressed the Railway Commission continuously for nearly three years for a revision of the bill of lading contract, which would give to the public, at least, some of the protection to which they are entitled by law. The resolution urging the revision of the traffic forms, passed at the Winnipeg Convention, September, 1906, was forwarded to the proper authorities at Ottawa. After much delay a date was fixed for the consideration of same. This was further postponed. The railways finally submitted to the Commission a form of contract, as prepared by their legal representatives. This was the first practical step taken by the railways to conform with the order made by the Commission in October, 1904, directing a revision of all traffic forms. The draft submitted was sent out by the Commission on March 6th, with a request that all parties interested should make any representations



MR. WILLIAM LEVIS
(The Robt. Taylor Co., Ltd.)
Chairman of Nova Scotia Branch, 1907-08

and objections thereto, which they desired, and file the same on or before May 1st.

The draft was carefully considered by your Committee. It was found that the conditions were, as a whole, unjust, unreasonable, and in contravention of the spirit of the Railway Act, and that they were, in many instances, more onerous than those now in use.

Objections were taken to all of the 29 clauses submitted, as the railways in nearly every instance sought to limit their liability as common carriers. The Railway Act says, "The railways shall receive, carry and deliver all traffic. Every person aggrieved by any neglect or refusal in the premises, shall have an action therefor against the company, from which action the company shall not be relieved by any notice, condition or declaration, if the damage arises from any negligence or omission of the company or its servants." This is the statute law. In view of this your Committee are of the opinion that there is no just reason why the railways should be permitted to restrict in any way their liability when such traffic is carried in accordance with the classification and tariff of tolls approved of by the Railway Commission.

An important point which seems to have been overlooked by some interests who submitted a draft of what was considered a proper bill of lading, is that the railways propose to receive the property "marked consigned and destined." Thus the initial carrier agrees to carry to its usual place of delivery at said destination, if on its road, otherwise to deliver to another carrier on the route to said destination.

The objections taken to the conditions of carriage submitted by the railways were duly filed with the Board, together with a copy of the resolution passed by the Association in convention at Winnipeg, September, 1906, asking for a *simple form of bill of lading, which would be a receipt for the goods and an undertaking to carry and deliver them at destination.* Failing the adoption of this clean bill of lading a request was made that we be permitted to appear before the Commission in support of our demand.

As the question is largely a legal matter, your Committee recommended the advisibility of employing counsel when the proper time came, in order to protect the interests of the Association. This action was approved of by the Executive Council.

Permission was asked of the Commission to submit for their consideration a bill of lading in accordance with the resolutions passed by the Association. No action has been taken further than to acknowledge receipt of our communication.

Circulars were issued by the department to Boards of Trade and kindred associations throughout Canada, with the result that there was a hearty and general endorsation of the action taken by the Committee, and resolutions to that effect were filed with the Railway Commission.

The matter is still pending.

Reciprocal Demurrage.

In view of the numerous complaints of delay in securing cars, and in handling traffic after being loaded, as well as delays in placing cars for unloading after arrival at destination, your Committee were of the opinion that the Railway Commission should adopt some regulation to provide for demurrage charges upon railway companies. A communication to that effect was filed with them in October last, asking that some such arrangement be put in effect before the provisional demurrage rules are made permanent.

The Commission has stated that it was not clear that they (the Board) had the power to impose reciprocal demurrage, but that experts had been appointed by them to investigate and advise whether or not the railways had sufficient equipment and facilities. After this information is obtained it is proposed to ask that the Board be empowered to make regulations to provide for demurrage charges upon railway companies. In this connection, it is suggested that it might be desirable to have an independent car service bureau under the control of the Commission, who would look after the service.

Your Committee are of the opinion that the experience of the last two years has been such as to warrant immediate action being taken to that end.

If it is fair and in the public interest that a charge should be made where freight cars are detained in loading and unloading, in order that they may be kept available for service, it is reasonable to expect that the railways should be subject to a similar penalty when they delay cars entailing serious losses to the public.

The Railway Act requires railways to provide all proper facilities for receiving, carrying and delivering traffic. Shippers have the right of appeal to the courts in the case of loss sustained through failure on the part of the carriers to furnish proper facilities. This is, however, an almost impossible task. The railways are, therefore, practically safe from prosecutions.

On the other hand, the Railway Commission has authorized

that all freight traffic in carloads, or less, which is or is to be loaded or unloaded by the shippers or consignees thereof, shall be subject as follows :

When cars are held under load or awaiting loads beyond the free time allowed by the rule prescribed for any reason for which the consignee or shipper is responsible, a toll of one dollar per car per day of twenty-four hours, or any part thereof, shall be charged to and paid by the shipper, consignee or other party responsible therefor, *in addition to all other tolls paid or payable, in respect of the goods carried, or to be carried in or on such car.*

Your Committee recommends the adoption of the resolution, which will be submitted later on, urging the Railway Commission to grant some measure of relief.

Railway Equipment.

Your Committee has during the year given this important matter serious consideration. Information has been furnished the Railway Commission in regard to shortage of cars, delays in transit, etc., which would, we believed, warrant prompt action being taken.

The Railway Commission held sittings in Ottawa in February last, at which they stated that hitherto they had felt a difficulty in making orders for the supply of cars or other equipment upon specific complaints, for fear that this might result in taking from others the facilities to which they were equally entitled, with the complainants. It was also felt that the unprecedented activity of business could not have been fully foreseen by the railway companies. The Commission further stated that they did not desire to hold the railway companies to a higher standard than seemed to be reasonable, but they proposed in the future to adopt all means within their power to make railway companies live up to a reasonable standard, and to give to the public, so far as circumstances rendered it possible, the service which the statute required.

Statements respecting rolling stock and equipment of various descriptions, have been asked for. In order to have information at first hand, the Commission has appointed to its staff an operating expert and an inspector of railway equipment. These officers have been for some time engaged in investigating the existing conditions of the various railways. With their help it is proposed to devise a system under which the railway companies will report regularly on their equipment, so that the public will be kept more fully informed than it has been in the past.

Certain information has already been given to the public as a result of these investigations, and it is expected that further evidence of the inadequacy of the equipment of the railways will be forthcoming at an early date.

The following statistics will bear out the statement that the railways have not until recently made any serious attempt to provide equipment for the growing demands of the country.

Railway Mileage and Equipment in Canada.

Year.	Miles in Operation.	Locomotives, all kinds	Freight Cars, including Cattle, Box, Refrigerator, Flat, Coal and Dump.
1903	18,988	2,587	80,252
1904	19,431	2,768	83,562
1905	20,487	2,906	86,296
1906	21,353	2,931	90,404

The equipment ordered by the principal railways for delivery in 1907 consists of (*a*) locomotives of all kinds, including switchers and passenger, 356; (*b*) cars of all kinds, which might be available for carriage of freight, 15,678. This includes flat, platform and ballast cars, which are at certain seasons of the year used by the railways for construction and ballasting purposes.

In considering these figures, allowance must, of course, be made for the fact that the traction power of the locomotives and the capacity of the cars have been greatly increased. But while it is satisfactory to note the improvements in this direction, it is still quite obvious that the equipment is not being added to as rapidly as would seem to be required by the steadily increasing mileage under operation, which, on June 30th last, was 21,819, with 5,000 new miles under construction.

Staking of Flat Cars for Lumber Shipments.

The question as to who shall provide stakes for flat and gondola cars for shipments of lumber is one of importance. At the present time the shippers are required to provide the necessary stakes and other equipment to secure loads on the



Characteristic Poses

cars. This involves an enormous expense and waste, and it is the opinion that it would be largely overcome by the railways in properly equipping their cars. The matter was dealt with in the last annual report. Since that time much information has been gathered as to the negotiations which have taken place in the United States. The Commission, who decided to allow the matter to remain in abeyance pending the outcome of these negotiations, advise that they feel they cannot take definite action until they have the benefit of the advice of their operating expert, who has been too busy since his recent appointment to make enquiries and to go fully into the subject. The Commission are also awaiting action of the Interstate Commerce Commission, on account of the international nature of the traffic.

Express Companies' Classification and Rates.

All express companies operating in Canada are now subject to the jurisdiction of the Railway Commission. The Railway Act provides that no company shall carry any goods by express until their tariffs have been submitted to and approved of by the Commission. The time for the filing and approval of the tariffs of tolls was limited to May 1st. Your Committee issued a circular to members of the Association, suggesting that as a general investigation of express matters was to take place, they file with the Transportation Department any complaints which they desired to make in regard to excessive rates or other grievances, in order that they might be brought to the attention of the Railway Commission. Considerable evidence and a number of complaints have been received.

A protest was made against the approval of the tariffs and classification of the companies, until such time as a thorough investigation could be made in order to ascertain whether or not the rates submitted were equitable. Particular attention was called to the fact that since November last the express companies had taken advantage of the compulsory filing of their tariffs to withdraw a number of special or commodity rates which had been in existence for some time. This, it was pointed out, should not be permitted, as it was fair to assume that conditions which existed when these special commodity rates were made, still exist, and their withdrawal would result in considerable hardship. It was suggested that the Commission should investigate the matter with the view of determining whether or not these rates should be continued and embodied in the tariffs to be approved.

As sufficient progress had not been made in the investigation, the time for the approval of the tariffs was further extended until November, 1907. In the meantime the express companies are permitted to charge such tolls as they might lawfully have charged, previous to July 13th, 1906, the date the Act came into effect.

In doing this it was stipulated that pending the approval of the said tariffs of tolls by the Commission, the express companies should not charge any tolls higher than those which were charged by them, respectively, on the first day of March, 1907, thus to a certain extent affording the protection against the withdrawal of commodity rates which we asked for.

It has been considered advisable that "express traffic" should be defined before the tariffs are finally approved, that is to say, what division should be made between express traffic and ordinary railway traffic. A conference has been suggested between the various interests for the early settlement of this question.

We are advised that counsel has been engaged for the investigation of the affairs of the express companies, and that such will take place as soon as possible after other matters, such as the telephone companies, etc., upon which the Commission has been engaged for some time are disposed of.

It will be noted that the Commission has determined that it shall be fully advised in respect to express traffic, tariffs, classification, etc., before finally approving of same. It is to be regretted similar action was not taken with the railway freight tariffs and traffic forms.

Weighing Carload Shipments.

Complaints have been received regarding the weighing of carload shipments. Many of the claims presented to the railways' claims departments are due to the arbitrary increase in weight, while the shipments are in transit. Instances have been given of accurate weights being furnished at the initial point and rechecked at destination, yet the weights secured by the railway scales en route were used for the collection of charges from the consignee, who was obliged to pay on this basis before he could receive his goods. After having paid the overcharge a claim may be presented to the railways for a refund—a very unsatisfactory procedure.

There are various and numerous ways in which errors are made in weighing on track scales, but as the weigher is in the employ of the railway company, he at all times is ready to endorse his weights as being absolutely correct. In consequence a dealer is frequently made to pay according to railway scales, for more weight than is received. This is particularly applicable to farm and other products sold on the basis of track scale weights.

Your Committee are of the opinion that there should be some independent arbitrator appointed at all the principal points known as "Track scale stations," for the purpose of weighing carload traffic, such person to be a sworn weigher, in the same manner as provided for at other public weigh scales. A resolution will be submitted to that effect.

Interchange Switching—Winnipeg Switching.

The Manager of the Department attended at the sitting of the Board of Railway Commissioners in Wininpeg, on September 21st, 1906, at the request of the Manitoba Branch, which complained of certain charges assessed by the railways in Winnipeg, in addition to the regular freight tolls.

On taking the matter up further with the Commission they stated that the application involved consideration of the following three questions :

1. The question or principle as to whether, when cars brought in over the Canadian Pacific Railway, and handed to the Canadian Northern Railway for final delivery on the tracks of that company or *vice versa*, the through rate charged should include delivery on the tracks of the delivering company.

2. What switching charge should be allowed the delivering company.

3. If the rates in and out of Winnipeg should include switching charge ; are the present rates charged by the railway companies from and for delivery at their own terminals to be held to include this additional service, or should a further charge be added.

The railways were to have the privilege of submitting a written statement or argument in reply. This, we are advised, has been done.

Toronto Inter-switching.

A complaint on behalf of the Toronto Branch was filed with the Railway Commission in April last, protesting against the action of the Grand Trunk Railway in withdrawing from the arrangement for the interchange of traffic for delivery on industrial and other delivery sidings within the Toronto terminals. Formerly all carload traffic, regardless of where it originated, was placed upon such sidings without additional expense to the shippers or consignees over the regular rates to and from Toronto, as published in their tariffs. The only exception to this general arrangement was that the Grand Trunk fixed a maximum amount, which they would pay for the service on certain traffic upon which their revenue did not exceed $15.00 per car, which, in many instances, covered the total cost of the service. A number of industries previous to locating their plants had assurances that there would be no additional tolls charged, so far as the public was concerned, for switching between the different railway lines, provided the traffic was originally consigned to point of final delivery. Contracts were entered into for deliveries based upon the continuance of the arrangement, which had been in effect for a great many years undisturbed. On March 1st last the Grand Trunk withdrew from the arrangement, declining to allow any division of the rate for the service of the connecting line on traffic from what they termed "local" or "non-competitive" points. They now assess on such traffic a toll for the service of the delivery company over and above the through tariff rate (which remains the same). At the same time, if the same class of traffic originates at what they term a "competitive point" (a point served by another railway), they apply the published Toronto

rates through to final destination, allowing a division of the rate to the delivering line.

Other lines continue to protect the old established arrangement for delivery of all traffic regardles of its origin.

Complaint is made that the Grand Trunk does not afford equality of treatment, and shippers located at non-competitive points are being discriminated against.

In filing the complaint it was urged that in the event of it being necessary to have a hearing that the same take place at the earliest possible date. We regret to state that so far there has been no decision given in this respect. The Commission has stated, however, that the Chief Traffic Officer has this particular complaint and similar complaints in hand, with a view of making an early report. We are also advised that in view of the numerous complaints in regard to switching service generally throughout the country, a general report is to be made upon the whole question. Afterwards the individual complaints will be taken up on their merits. Assurances have been given that this report will be forthcoming at an early date.

London Inter-switching Case.

The appeal of the Grand Trunk Railway against the decision of the Railway Commission in the London Inter-switching Case has been heard and dismissed. It will be remembered that the Commission ordered the interchange of freight traffic between the Canadian Pacific and Grand Trunk Railway companies at London, requiring the companies to protect the published rates through to the sidings upon which the freight was delivered without the addition of a switching charge for the interchange. The Supreme Court upheld the Commission in requiring the adoption of through rates to the final destination without the addition of switching charges, where traffic is interchanged in terminals. This is a very important decision, as it sets at rest the right of shippers to require the railway companies to grant through rates related to the whole distance over which the traffic is carried, and not to be made up on the basis of the rates to one terminal plus the local rate or switching charge beyond.

Insurance on Freight in Transit.

The Canadian Pacific Railway announced its intention of accepting responsibility for loss or damage to property by fire while in its possession, whether in cars or warehouses. This decision doubtless results in some manner from the continued agitation which the Association has kept up against limitation of liability in bills of lading. It is hoped that the other transportation companies will adopt the same policy. In any event it strengthens the contention of the Association for a clean bill of lading.

Shed Storage Tariffs.

The matter of the conditions in the shed storage tariffs of the railway companies was dealt with in the last annual report. The Commission have these tariffs now under consideration. The whole question is to be reported on by their Chief Traffic Officer at an early date.

Advertising on Freight Cars.

Complaints were made that foreign manufacturers were permitted to place cards or placards on cars coming into Canada advertising their goods, whilst a like privilege was denied the Canadian manufacurer. This practice is contrary to the regulations of the railways, both in the United States and Canada, and instructions have been issued by the railways that this must be discontinued.

Classification and Ratings on Iron Articles.

The department prepared statements showing the differences between the rates from various shipping points in Canada and in the United States to the same destination. A special committee was appointed to advise with the manager in connection with the same. As the matter was involved in the International Rate Case, its consideration was left in abeyance until the new rates have come into effect.

Complaints re Pilferage in Transit.

A number of complaints regarding pilferages and shortages from packages whilst in transit have been received. Investigation was made in order to ascertain if the trouble was widespread. The opinion of the Committee was that it would be difficult for the Association to take any action which would improve the matter, as each case would have to be investigated individually, and it was thought this could be done better by the shipper or consignee. It is further expected that the bill of lading when adopted will, to a large extent, do away with many claims of this nature.

International Car Service Rules.

Interested parties complained that the car service rules in force on the Intercolonial Railway were those formerly adopted by the Canadian Freight Association. The department communicated with the Minister of Railways and Canals, suggesting the adoption of the Railway Commission's rules, which are in effect on other railways, which has been done.



MR. R. P. McLENNAN
(McLennan, McFeely & Co., Ltd.)
B. C. Vice-President, 1907-'08

Rates to the North-West.

The lines from St. Paul and Minneapolis reduced the rates to Wininpeg, Portage la Prairie and Brandon in March last ; that is to say, the proportional rates, which were in effect from Fort William to Winnipeg were put into effect from St. Paul. This reduction places manufacturers south of us in an advantageous position, as compared with manufacturers in the East. So far no reduction has been made in the rates from Eastern Canada. The department has the matter in hand and negotiations are now going on with the view of bringing about some reduction, to take effect at an early date.

The following matters are being dealt with by the Railway Commission :

Standard Mileage Tariffs.

The Commission has directed that every railway company, subject to the legislative authority of the Parliament of Canada, furnish on or before the first day of October next statements for the year ending June 30th, 1907, showing in detail :

A. The assets and liabilities of the company.

B. The amount of stock issued and outstanding.

C. The amount and nature of the consideration received by the company for such issue.

D. The gross earnings or receipts or expenditures.

E. The amount and nature of any bonus, gift or subsidy received by the company from any source whatsoever.

F. The bonds issued at any time by the company.

G. The amount and nature of the consideration received for the issue of such bonds.

H. The character and extent of any liabilities outstanding chargeable upon the property.

I. The cost of construction of the company's railways or any part thereof.

J. The amount and nature of the consideration paid by the company for any property acquired by it.

K. The particulars of any lease, contract or arrangement entered into between the company or any other company or person.

L. And generally the extent, nature, value and particulars of the property earnings and business of the company.

The Commission further directs that each railway company shall furnish to the Board on or before the first day of October next a statement, showing the details and particulars for the year ending June 30th, 1907, as follows : Total miles under operation, details as to freight and passenger revenue per mile of road and carried one mile.

Joint Tariffs.

The Commission has also ordered that each railway furnish within three months of the date of the order (namely, July 4th, 1907), information as to the railway company or companies with which it has direct connection in Canada, the railway company or companies with which it has joint tariffs; whether any such company is willing to extend the scope of such joint tariffs; the railway company or companies with which every such company is prepared to negotiate for joint tariffs; if not to state fully their reasons for objections.

These orders are of importance, in that they will enable the Commission in the first place to determine whether or not the rates being charged are fair and reasonable, and in the second place whether or not through routes and rates are being afforded by all the railways.

In dealing with the question of freight rates and of proper facilities for interchange of traffic between the respective railways, your Committee has represented the necessity for such information. Its importance cannot be over-estimated. It is, therefore, gratifying to know that the Commission has taken this action.

Recommendations.

Your Committee recommend the favorable consideration of the following resolutions:

Railway Commission.

Whereas the Parliament of Canada have, during the last two years, enlarged the duties of the Board of Railway Commissioners for Canada much beyond those mentioned in the Railway Act of 1903 ; and

Whereas, in our opinion, the duties devolving upon the present Commissioners have become so numerous and so diversified that it is impossible to render the service required in the interests of the public ; be it

Resolved,—That the Canadian Manufacturers' Association, now in convention, place upon record its recognition of the valuable services which the Board of Railway Commissioners has been rendering in the public interest, and in order to provide for the continuance of this important work, respectfully suggests the advisabilty of increasing the membership and reorganizing the Board under a plan to be devised or approved by the Board, which would divide and specialize the work of the Commissioners.

Reciprocal Demurrage.

Whereas the investigations which have been and are being made by the Railway Commission undoubtedly establish the fact that the railways have totally failed to supply sufficient equipment and adequate and proper facilities for the handling of the business of the country ; and

Whereas the Railway Commission has authorized certain regulations, which provide for the charging of additional tolls to the shippers or consignees when cars are held under load or awaiting loads beyond the free time allowed ; and

Whereas the car service rules, authorized by the Board, provide for certain exceptions, but in case of a dispute invariably cast the burden of proof upon the shipper or consignee, while the arbitrator is appointed by and under the control of the interested railways ; be it

Resolved,—That the Canadian Manufacturers' Association, now in convention, respectfully petition the Honorable the Board of Railway Commissioners for Canada to provide and put in effect without delay some plan for penalties against the railway companies, for failure within a reasonable limit, first, to supply empty cars ; second, to haul loaded cars to destination, or, third, to place cars for unloading after arrival at destination, so as to secure to the public a prompt and adequate service within the meaning of the Railway Act ; shippers to be given the same protection by the Board as is afforded to the railways ; the arrangement to provide for an equitable adjustment of demurrage charges by an independent body.

Weighing Carload Shipments.

Whereas the weighing of carload freight shipments on railway track scales for the purpose of assessing freight tolls is entirely under the control of the railway companies, who reserve the right to increase the weight of any shipments whils in transit ; and

Whereas there are various and numerous ways in which errors are made in weighing on railway track scales, resulting in overcharges and excessive freight tolls ; and

Whereas adjustments of overcharges can only be secured after persistent protests involving voluminous correspondence and vexatious delays ; be it

Resolved,—That the Canadian Manufacturers' Association, now in convention, being of the opinion that there should be independent sworn weighers stationed at all principal stations, known as " Track Scale Stations," for the purpose of weighing all carload traffic, hereby respectfully petitions the Honorable the Board of Railway Commissioners for Canada to make regulations to provide for the appointment of sworn weighers at the points designated ; such appointments and the manner in which the weighing shall be done to be under the direction of the Board.

J. H. HOUSSER, *Chairman.*

G. M. MURRAY, *Secretary.*

J. E. WALSH, *Manager Transportation Department.*

Mr. J. H. Housser presented and read a summary of the report of the Railway and Transportation Committee, taking it up in sections, after first reading the preamble, the first section covering pages 6, 7, 8 and part of 9 of the Reports of Standing Committees.

Mr. T. L. Moffatt.—Before you dispose of that section let me remark that there are just five lines devoted to " Stoves."

I think we are very modest. Very great good has resulted from the work of this Committee. As an instance, we have had a shipment to Sherbrooke for the past four years of about seventy-five or eighty stoves. They are very conservative down there; they order about the same quantity every year. I was comparing the freight charges last week, and I find we saved $35 in our shipment this year over that of last year. I think we ought to be proud of our Transportation Committee, and also proud of being connected with an Association that does things along that line. I think we are better off with the changes that have been made in the classification and the rates on stoves than with the ten per cent. addition to our tariff. We would prefer a tariff of twenty-five per cent., as it is now, and raise strangers to a thirty-five per cent. tariff.

Speaking for our own firm, I think we pay the railways something like $20,000 a year, directly or indirectly, and we must have saved not less than $2,000 on freights alone solely through the Transportation Committee. Of course, it is backed up by that popular institution that the Government created, the Railway Commission. But the Committee did not have to appeal to the Railway Commission; they did it themselves. We have to thank Mr. Marlow and Mr. Walsh, two very efficient officers. It is a pleasure to work with those two gentlemen.

The section as read was adopted.

Mr. Housser read sections of report, covering pages 9 to 15, which were adopted without discussion.

Mr. Housser read section of report on "Reciprocal Demurrage," contained on pages 15 and 16.

Mr. E. G. Henderson.—It seems to me that this section is the most important in the whole report, and the most important section of the whole proceedings of this Association. I may be wrong, but it seems to me that instead of lower rates and more tariff, the great want of Canada to-day is better transportation. Whether it is that the terminal facilities are not proper or the locomotives are not plentiful enough, I do not know; but manufacturers do not get the car service they ought to get; and it seems to me if the Railway companies can hold us up for delays in unloading cars, there ought to be some way whereby we can hold up the railway companies if they do not supply us with cars. It is simply an outrage the way some manufacturers have been dealt with during the last year. I know myself of instances where work has been closed down for weeks at a time simply because the railways can not or will not supply cars; and what is worse, they do not supply cars for Canadian produce, but they do it for through produce from the United States. I think it is time this Association impressed upon the Railway Commission, that cars must be provided for Canadian business before United States business is attended to by the Canadian railways.

I believe this is the most important paragraph, and the most important matter that could come before this Association.

Mr. Rowley.—I would like to ask the Chairman of the Committee whether the Committee has considered, in dealing with the question of reciprocal demurrage, the possibility of an arrangement similar to that which I understand prevails in some of the United States, or some parts of Great Britain? By this a shipper is allowed so many hours in which to load or unload certain cars. If he loads or unloads his cars in less time than that allotted, he is allowed a little longer time to load or unload other cars? Before the railways were so arbitrary as they are now, the company I represent had an arrangement of that sort, by which if we loaded cars in less than the regular time, that time was placed to our credit, and was allowed on other cars before demurrage was charged.

Mr. Marlow.—I did press upon the Commission the view suggested by Mr. Rowley. In England the practice of charging freight tolls is to have a certain rate for carriage and an additional rate for terminal service, the terminal service including the tracks, unless you provide your own, and also the length of time you operate the cars. That practice does not prevail here, the freight toll including all the terminal as well as the carrying service. In the United States what is known as the average arrangement prevails, by which an allowance is made on one car to offset another; and that I brought to the attention of the Railway Commission. I also gave them a copy of the agreements under which these average arrangements prevail in Ohio and Virginia, and various States of the Union; and I suggested if they could not provide some means for relieving our trouble and avoiding these penalties, as I claim they were, that they should give us such an arrangement. The Commission answered me finally after some months by saying that after they considered it they felt that no good would be accomplished by approving of an arrangement that would allow a man by the exercise of diligence in one case to get his cars unloaded within the average time which the rule allowed, and in the other case through negligence allow the car which was required by his neighbor to remain under load, while he was not being mulcted in damages so as to force the release of the equipment. They thought in the present state of equipment of the railways it would be better to allow a reasonable average time for all unloading, and avoid such an arrangement; but they gave consideration to this reciprocal demurrage plan, and thought through this some means might be provided whereby a penalty applied to the railways would force them to provide additional equipment rather than pay the penalty.

Mr. Housser.—I may say further, I think since the Railway Commission have approved of the car service rules the railways are inclined to be a good deal more severe than they were before. That is my experience.

The clause was adopted.

Mr. Housser read sections of report as to "Railway Equipment," "Railway Mileage and Equipment in Canada," "Staking of Flat Cars for Lumber Shipments," "Express Companies' Classification and Rates," "Weighing Carload Shipments," and "Interchange Switches," covering pages 16, 17, 18, 19, 20 and part of 21, which were adopted without discussion.

Mr. Housser.—There are a number of other matters which your Committee dealt with during the year. I will read the headings: Page 21, "Insurance on Freight in Transit," "Shed Storage Tariffs," "Advertising on Freight Cars."

Mr. Rowley.—As to advertising on freight cars, they do not discontinue; it is still being done.

Mr. Housser.—The railways have done all in their power; it lies with their employees to carry it out.

Mr. Rowley.—When I am at home I pass the track of the Grand Trunk Railway six times a day at Ottawa, and I notice if by any possibility any Canadian papermaker or matchmaker puts one of his labels on the car, it is immediately torn off, while foreign labels are nailed on and allowed to stay there. It was done last week; freight cars from Michigan, Wisconsin and all parts of the country contained advertisements.

Mr. Marlow.—I had a great deal to do with this, and perhaps I can explain the attitude of the committee. It was dealt with. It has been under consideration for the past two years, and there is no doubt about it that through traffic which comes on through trains and passes into Canada, particularly stuff carried in large blocks, passes through without the labels being touched in any way, whereas with that loaded in Canada the placards are torn off before the cars proceed from the yards.

The decision of the Committee was this: The placing of advertisements on freight cars is not a right of the shipper; there is nothing upon which he can base a claim to the right of putting a placard upon a car; and the decision of the railways seems to be that an advertisement shall not go on their

cars. As soon as we discussed it informally with them they commenced very actively to negotiate with the United States railways to stop it, and several bureaus in the United States replied that they were using their best endeavors to stop it over there, without much success owing to the competitive nature of the traffic, but they hoped to have it all stopped.

The Association cannot claim it has a right to place advertisements on cars, and if concerted action is to be taken, the railways assure us, it will be in the way of stopping the practice altogether. Some of our members have the privilege, whether by connivance of the railways or otherwise, and the Committee felt it would not receive thanks from anybody if it took up the question actively, and it resulted in the cutting off of the privileges the members enjoy at present without giving them any return.

Mr. Rowley.—The point is, a car will come into any switch or siding and will have an advertisement of carriages or stoves or sand or lime from the United States or some other foreign country, and that car will be allowed to remain there and the cards will not be removed, while the Canadian shipper is not allowed to put one over it or next to it or alongside of it. I don't claim we have any right to placard other people's cars with our labels; but we have a right, it seems to me, to demand that if Canadians are not allowed to do it, the yardmen should have instructions to take other people's cards off.

Mr. Marlow.—We reported the matter to the Executive Council in the hope that it would give us authority to proceed to the Railway Commission and ask them to cut it off entirely, but they did not give us that authority.

Mr. J. E. Walsh.—Since this matter was up for discussion by the Committee, the American Railway Association has taken it up actively, and nearly all lines have issued positive instructions that the advertisements must be removed; that in the case of cars coming to them at junction points, if they find these advertisements on, they have to take them off and charge the expense to the line owning the car. Those instructions have also been sent out here by the roads in Canada since the 1st of September, so that I think they are doing everything they possibly can.

Mr. Ballantyne.—As a shipper on both sides of the line, our company placards every car that goes out, and we have never had any trouble either with the American or Canadian railways.

Mr. Rowley.—I have seen your placards often. (Laughter.)

Mr. Housser continued reading the headings of the different sections, as follows: "Classification and Ratings of Iron Articles," "Complaints *re* Pilferage in Transit," "Intercolonial Car Service Rules," "Rates to the Northwest."

Mr. Rowley.—Hasn't it always been the case that they got better rates than we here?

Mr. Housser.—No.

Mr. Walsh.—Prior to the time of the Hill line coming into Winnipeg over their own tracks, the rate from St. Paul, Minnesota, to Winnipeg was $1.10; as soon as they got their line built they reduced it to 89 cents, with a proportional rate to Fort William and Port Arthur, and the situation remains the same to-day; there has been no corresponding reduction made in the rates from the east.

Mr. Rowley.—Cannot we take goods from St. Louis to Winnipeg very much cheaper than we can from other points at a lesser distance?

Mr. Walsh.—Yes. I might say that there is a tariff now in course of preparation which we expect will be issued shortly; I don't know just exactly what reduction will be made, but there is going to be some.

Mr. Housser read sections *re* "Standard Mileage Tariffs" and "Joint Tariffs," which with the foregoing sections, contained on pages 22 and 23, were adopted.

Mr. Housser read resolution *re* "Railway Commission" contained on page 24.

Mr. Marlow.—I move the adoption of that resolution, seconded by Mr. Housser. When the Commission was originally appointed, Mr. Blair, then Minister of Railways, was very emphatic in his statement that the Commissioners would have their time so divided that they could each give special attention to particular departments of railway work—that is, the legal, traffic and operating; but under the framing of the Act that was impossible. It was also rendered impossible later by reason of the fact that the express, telegraph and telephone companies were placed under their supervision, and a great many other things were included amongst their duties. As it is, although we have had cases before them for a period of sometimes as long as two years, they are hearing new matters relating to telephones, telegraphs and express, which take up as long as eight weeks in the hearing alone, to say nothing of the time for transcribing the notes and studying them afterwards. Consequently freight matters frequently rest in abeyance, while complaints relating to express, telephone and telegraph companies are being adjusted. If the work of the Commission is to reach the maximum of usefulness, it must be done as is it by the United States Commission, which divides itself into an operating division and a traffic division. In this way the work is subdivided among the various Commissioners, by which means complaints are expeditiously handled and decisions reached.

The resolution was adopted.

Mr. Houser read resolution re "Reciprocal Demurrage" and moved its adoption, seconded by Mr. W. R. Dunn. Carried.

Mr. Housser read resolution *re* "Weighing Carload Shipments" contained on page 25 and moved its adoption.

Mr. J. F. Ellis.—I have much pleasure in seconding the motion for the adoption of that resolution. I endorse it most heartily. If it were not a matter of dollars and cents the way we were treated in the matter of railway weights would be really laughable.

We sent a carload of goods to Vancouver valued at about three or four thousand dollars. The goods were weighed before they left the warehouse, and weighed on the weigh scales at the station, and when they got to their destination the Railway claimed that we should pay thirty or forty dollars more freight, and they would not give up the goods until we made that payment. We proved we were right, but we have not yet been able to get that $30 back.

The resolution was adopted.

Mr. Housser.—I beg to move the adoption of the report as a whole.

Mr. E. G. Henderson.—I have much pleasure in seconding the adoption of the report, and I think this report is the best evidence we have of the value of the Association. If any man has any doubt about his getting value for the small fee he pays I think the reading of this report will at once dispel that illusion. I am firmly convinced that no Committee, and I do not wish to disparage the work of any other Committee, has done better work for the Association than the Transportation Committee. For that reason I have very great pleasure in seconding the adoption of the report.

The President.—Before putting that motion to you I wish to say one word regarding the Transportation Committee. I think we as an Association deserve to congratulate ourselves upon the Chairman we have had during the past year, upon the members of that Committee, and upon the officials who have had charge of that department. There is no work in connection with this Association, as Mr. Henderson has said, that shows such good results and delivers so much goods for so little money as does the Transportation Department. Further than that, it is a benefit to every shipper in Canada, and I think we ought to make plain to these men outside our ranks the great work that is being done by this Association.

We should congratulate ourselves that the Transportation Department is in such strong hands and has done such good service. But we are just started, and in the years to come you will see still greater results brought about by this Committee.

The report as a whole was then adopted.

The President—We regret to announce that Mr. James Hardwell is unable, on account of illness, to be with us to-day, and consequently that that part of the programme must be cancelled.

PRESENTATION TO MR. J. F. M. STEWART.

I shall now ask Mr. J. F. Ellis and Mr. J. F. M. Stewart to come forward.

Mr. Ellis.—Mr. President and Gentlemen,—About eight years ago the membership of this Association did not amount to as many hundreds as it now does thousands. At that time, the beginning of this century, it was seriously considered by many of those members, "Had we not better close up the Canadian Manufacturers' Association?" They questioned its value. A few thought differently; they thought that this Association had a mission, and that if it was properly managed that mission would work out for the benefit of the manufacturers of the Dominion. In their meetings the first question they considered and the one which they thought the most important was the appointment of a Secretary. This Association has been singularly fortunate in the choice of its Secretaries during the past eight years, and without any reflection on the rest of the Executive, even from the President downward, I consider that the Secretaries that we have had for the past eight years are the cause of the brilliant success of the Canadian Manufacturers' Association. (Applause.)

We began at that time with Mr. Russell. All of you know what a hard worker and an efficient organizer he was. He had to take hold of the affairs of this Association without anyone to suggest how they should be carried on. He was followed by a very able successor, the genial and diplomatic Mr. Younge. (Applause.) These gentlemen made such a mark for themselves among the manufacturers of Canada that this Association found it impossible to retain their services. But, gentlemen, we did not despair because they were leaving us; we had others amongst us that we felt sure could fill their place, and we have never since then regretted that Mr. Stewart became Secretary of this Association. (Applause.)

As a member of the Finance Committee, I was associated very intimately with Mr. Stewart, and I can bear testimony to his zeal and earnestness in the work of this Association, and to his successful management during the time he filled the important position of Secretary.

Mr. Stewart, I feel highly complimented on being asked by the Association to make you a presentation as some slight token of its regard for you and the work you have done, and I trust this clock, which we wish you now to accept, may always remind you of the warm feeling that the members of the Association have for you and your success in the future. (Prolonged applause.)

Mr. Stewart.—Mr. Ellis, Mr. President and Gentlemen,—You have placed me in a very difficult position. It is actually harder to leave the Association than to do the Association's work. At least I do not remember of ever having been in a much tighter place than I am at the present time. I have received nothing but kindness at the hands of the Association, its officers and its members generally; it is really almost impossible for one with the little business experience I have had to express to you hard-headed business men what it really means to have this added kindness shown to me.

You were kind to me in keeping me in your service for a little over five years. I assumed my duties first as Mr. Russell's assistant, to whom the Association owes so much. I was Mr. Younge's assistant during all of his successful incumbency of the office, and on his resignation you honored me by naming me his successor. During this time the Association grew from an organization of some six hundred members, having seed planted just in and around this city, into a thoroughly representative, permanent, national organization with a membership approaching twenty-five hundred. Six years ago the Secretary and his assistant were able to manage the affairs of your Association, which at that time included the publishing of your paper, handling the committee work as it was at that time, canvassing for new members and worrying about



Characteristic Poses

your financial statement. Since then you have added two men to your staff to look after INDUSTRIAL CANADA; you have placed an expert in charge of transportation matters; another expert in charge of insurance matters; and an office man has grown up in your service; and Mr. Booth, if he was so minded, could declare a handsome dividend.

It would be impossible to estimate in dollars and cents the value that that great development in the business world has been to myself; nor do I think that there is any organization in Canada or any position in Canada which gives a young man the same great privileges for meeting business men from Victoria to Sydney. Your Association, sir, is a great one; its aims are national, and its scope is only limited by

the business possibilities of this great Dominion; but I think the greatest guarantee of the permanency and usefulness of your big organization is the time and efforts that your honorary officers give, and give so freely, to the great work which they have undertaken.

I would like, Mr. President, to compliment your very capable Secretary on the most magnificent arrangements that we have seen for your present Convention. I think the Secretaries who have gone before can learn lessons about working out the details of an organization when it is holding its Annual Meeting from what we have seen this year. (Hear, hear.) I only hope that your Secretary, Mr. Murray, and his able assistants will always receive the individual co-operation of every member of the Association. Unless they do, the work that the Association should do will not reach its full limit.

On behalf of my good wife and of myself, I thank you for your beautiful gift. It will stand in our home as a permanent souvenir reminding us of your great kindness and thoughtfulness, and reminding me of the great debt I owe the Association, the Executive officers of the Association, and the members generally. I thank you. (Prolonged applause.)

The President.—I will call upon Mr. Housser to come forward and make the presentation to our friend, Mr. Marlow. (Applause.)

PRESENTATION TO MR. J. R. MARLOW.

Mr. Housser.—Mr. President and Gentlemen, as Chairman of the Railway and Transportation Committee, it is my privilege to perform this duty which is set down on the programme. The occasion is one which I feel calls for some extended remarks, but as the hour is already well advanced and there is much business to be gone through with, I shall be just as brief as possible.

Mr. Marlow, I need scarcely say that the Association has accepted your resignation with deep regret. In you we have always realized that we had a most valued officer, one who not only had a thorough grasp of the subjects with which the Department was called upon to deal, but one who possessed the rare faculty of retaining the friendship and good-will of the very men whom it was sometimes necessary for us to oppose. These qualifications, combined with an apparently unlimited capacity for work and a loyal devotion to the interests of the Association, gained for you our warmest esteem and our lasting gratitude.

Under your direction the Department made splendid progress, and we all appreciate more than we can say the value of the services it rendered. Much of the credit for the results that are even now being achieved is unquestionably due to the careful manner in which the ground was prepared by yourself.

We are genuinely sorry to lose you, but we are pleased that in making a change you cast in your lot with a manufacturing industry, and more than pleased that circumstances have enabled you still to connect yourself with our committee. We hope that this will long be the case, so that we may continue to profit by your advice and your experience.

On behalf of the Association, I have great pleasure in asking you, Mr. Marlow, to accept this watch, chain and locket, and to wish you a long life and prosperity in your new work.

Mr. Marlow.—Mr. President and Gentlemen,—I feel very deeply grateful to you for these beautiful gifts, and I feel much more embarrassed than Mr. Stewart said he was. (Laughter.) I thank you for the very very kind words you have used in expressing the Association's recognition of my work while in charge of the Transportation Department. I feel I do not deserve the praise that has been bestowed upon me. I recognize that the work of the Department has been good, but those results, I think, flow from the practical methods that have been adopted by the Association, not only in its Transportation Department, but in all other branches of its work.

During my term of office I was always so fortunate as to act under the guidance of a Committee of gentlemen whose interest was in the work, and who were always willing, and never failed to give me assistance and advice whenever it was needed. I think that the members of the Committee may be credited with the good results that have been attained, and which have been referred to in such high terms of approval during the afternoon.

I was also fortunate in coming in contact during my term of office with a very great number of members of the Association, and by them I was invariably received with the utmost consideration and respect, and I always felt that whatever work I accomplished was inspired mainly by the good support that I received, not only from the Committee, but from the membership at large.

The work of the Department is an important one. The report which has been read this afternoon is an evidence of that fact. I fancy that the cost of transportation of raw materials and of finished products is vital to almost all national and industrial development, and the work of checking these numerous changes in classifications and freight tolls is a very difficult one indeed. Tremendous influences have been wielded by the railroad companies such as cannot be appreciated until one comes in contact with them; but on the other hand, through the Transportation Department the Association is able to exert a counteracting influence, which has been felt to such an extent that some of the prominent outstanding matters of contention between the Association and the railways have been satisfactorily adjusted. The preventive work of the Department must not be overlooked. It cannot be estimated, yet it is there, and of inestimable value to the membership at large. The policy of the Department under the direction of the Committee of treating with the railways in all matters of dispute, leads to protracted negotiations, which have to be tactfully managed; and the railways, being slow to adopt any changes in the nature of modifications or anything that appears so to them, force appeals at times to the Railway Commission; but, I am proud to say, in every case in which the Association has appealed to the Commission, even in the most contentious matters, such as "reciprocal demurrage" and Transcontinental Railway matters, the final result has been such as to reflect great credit upon the Association.

In selecting Mr. Walsh to succeed me, the Association has found a very capable and good officer, and one who has a wide range of experience in the railway traffic world, and whose services will be felt in the work that is before you. Mr. Walsh can be relied upon to conduct the Department successfully, and he will without a doubt extend its usefulness and influence. I feel sure he will continue to enjoy the splendid support which I received. I am satisfied that the Transportation Department will continue to improve and grow, and be one of the stars in the Association's firmament.

I thank you, Mr. Chairman and members, for your very generous recognition of my humble efforts on behalf of the Association, and I can assure you it will always be esteemed by me a privilege to be able to assist in the work. (Applause.)

MUTUAL INSURANCE COMPANIES.

The President.—This morning, when the meeting adjourned, the insurance report was adopted, with the understanding that there be just five minutes devoted to a speech, in which the Committee wished to put forward some matters in connection with it. The time has now arrived.

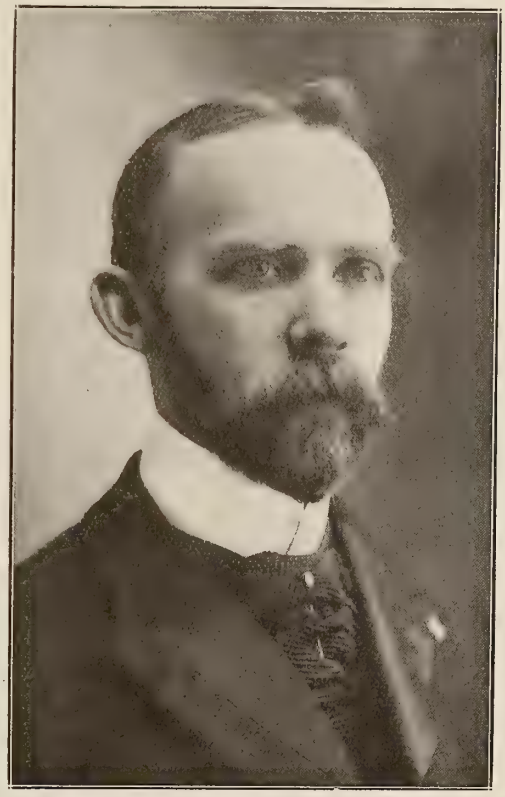
Mr. Tindall.—Mr. President and gentlemen, when the insurance report was presented and adopted this morning it was felt that there was one matter in particular that should be brought before the Association at a fuller meeting. It is not the intention to take up our time but for a few moments. When the Mutual Fire Insurance Companies finally got in a position where they could do business we found that the Department at Ottawa had imposed restrictions and regulations that were not contemplated. We are not in any way complaining of these restrictions or regulations; they are obstacles that we are quite capable of overcoming. But we desire to overcome them at once. We feel we have gone on with this insurance problem so long and we have been so successful with it that we cannot afford to have that success in any way lessened at the present time because we are asked to put up so large a cash deposit before we can do business.

I will let the Manager of the Department explain to you how that comes about and what the reason of it is. After he has spoken we have with us to-day Mr. E. E. Perry, of Indianapolis, who was organizer of the National Association of Factory Mutual Insurance Companies of the United States. In a few minutes, I think, he could give you some information that might be of value to you, and with your permission and that of the President's, he will make those few remarks to you. I will call upon Mr. Heaton to make the explanation to which I have referred.

Mr. Heaton.—Mr. President and gentlemen, the information I have to give you will be very brief, but it is of considerable importance. During the last three and a half months the officers in charge of my Department have canvassed practically every member of the Association in the Provinces of Ontario and Quebec, or at all events, the largest proportion of them, with a view to pressing the claims upon them of the two Mutual Insurance Companies that have been organized in connection with and under the supervision of our Insurance Department. We have made to you certain statements, amongst others that we expected to be organized by about the 1st day of September. When the charters for these two companies were granted to us by the Government certain conditions were imposed. Amongst others, the conditions were, first, that you should subscribe one million of dollars of insurance for each company; second, that you should give to the companies from time to time notes representing $50,000, upon which assessments might in future be made. Those two conditions seemed to your Committee to be the minimum for which they should strive. So much were they impressed, however with the necessity of making the companies strong beyond any peradventure that the Committee voluntarily assumed the task of increasing the one million of insurance by four times and the $50,000 of premium notes by seven times, and in order that we might test the sincerity of the members of the Association and ascertain how you viewed the proposals that had been made, a canvass was made amongst you on this behalf.

On Friday last, by instructions of the Insurance Committee, I went to Ottawa to lay our claim before the representative of the Government in the Insurance Department. At that time I laid before him the completed documents showing that the exceedingly high ideal and the arduous task we had set ourselves had been practically, if not entirely, accomplished. The task of obtaining $8,000,000 of insurance and of obtaining the premium notes of the leading manufacturers of this country to the extent of $700,000, is perhaps one that has scarcely been appreciated by you who have been called upon, and who in the course of fifteen minutes or half an hour have disposed of the whole situation; but when you come to think that it meant that we have had of necessity to secure from six hundred members of this Association in the Provinces of Ontario and Quebec and the Maritime Provinces, their practical adhesion to our scheme and their practical support by the signing of premium notes, you will have some idea of the work that has been involved and of the task we have assumed. And yet, sir, much as we thought we were doing, and strong as we thought we were making these companies, on Friday we were met by a further condition imposed by the Government, a condition that I am frank to confess we did not expect, that, apart and above everything else, before the Insurance Department would grant us licenses to do business they must be satisfied that the members of this Association who are desirous of securing insurance in our mutual companies had actually paid in cash the sum of $20,000.

Now, that is not a supreme task by any means, and yet just at this juncture, when we were hoping to be able to announce to you that the companies were ready to start business and the work of our Insurance Department in respect



MR. C. R. McCULLOUGH
(Ontario Engraving Co.)
Chairman Industrial Committee, 1907-08

to these companies had practically ceased, we are met with this somewhat unusual and fairly difficult task to accomplish.

At the meeing of the directors of the two companies yesterday it was decided that the membership of the Association, those who had already signed applications for insurance in our mutual companies, should be requested to pay to the trustees appointed for this particular purpose, Messrs. Burton and Burland, a sum representing from fifteen to twenty-five per cent. of the notes that have been so signed, in order that we may receive the funds necessary to place with the Dominion Government. These funds will be held in trust, and will be for the purpose of meeting the Government requirements in respect of deposit and cash on hand. The funds will not be used by the companies, except for this particular purpose. At the termination of the policy contract the money contributed for the special purpose of the "Deposit" will be returned to the policy-holders. A further provision has been made in the interval, that if at the end of three months no policy has been issued, at the request of the members the

money will be returned with interest at 4 per cent. per annum.

Now, sir, one final word. We are always meeting difficulties, and the last difficulty is this, that the Insurance Superintendent is leaving Ottawa on the 8th day of October for a somewhat protracted trip, and unless we can accomplish our task on or before the 8th day of October, we are likely to be delayed in the starting of our companies until the beginning of the year. Our Committee have, therefore, in the letter they are sending out to the members, suggested that promptness be a characteristic of your reply. We are asking for prompt remittance or the acceptance of a draft that will be made for this particular purpose.

That is the condition we are now in. I think you will be glad to hear from Mr. Perry; and in passing might I remark that, personally and as manager of the Department, I owe a great deal to Mr. Perry. The information with which he has furnished us, the books he has placed at our disposal, the ripe experience gained in many years of work of this kind which he has freely placed at our disposal, have been of immense value to us in the work we have undertaken, and I am satisfied when you hear from him that you will understand not only the urgency but the importance of the work we have been undertaking.

Mr. S. R. Wickett.—If you have $700,000 in notes and you want $20,000, why do you speak of 25 per cent.?

Mr. Heaton.—We hope to get 25 per cent. from all, but that will give us more than we immediately need. The Government say, "You must have at least $20,000 now, and ultimately $100,000; if you give us the full amount now, so much the better."

MR. PERRY DISCUSSES INSURANCE.

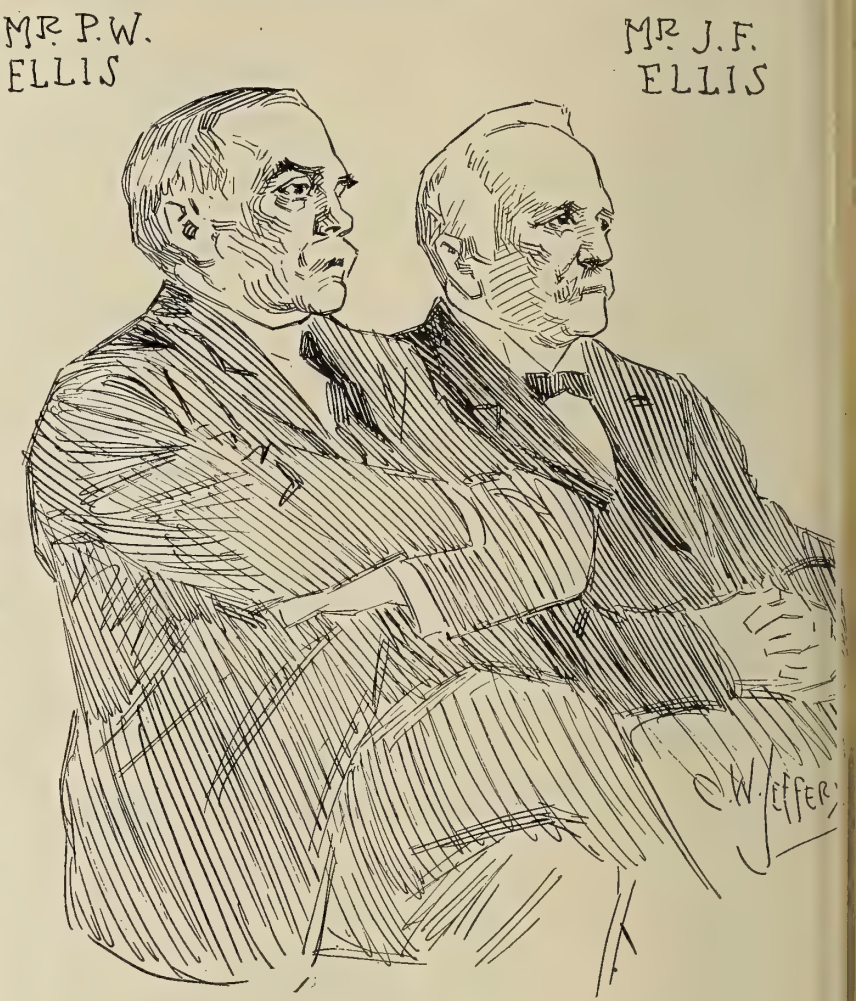
Mr. Perry.—Gentlemen, your President stated that you had a great deal of work ahead of you, and that I had better cut my remarks short. If he had known how little I could talk, he would not have taken that trouble.

Yesterday I had the opportunity of going over your situation with Mr. Heaton, and I can only say that after having had some eighteen to twenty years' experience in this same line, and having organized and assisted in the organization of some four or five companies, you have made the greatest headway in the shortest time of any experience I have ever had or have ever observed; and the character of the business which you are starting out with is better than any of the mutual companies that I have had the pleasure or honor of being connected with.

In a few words, my experience in something over eighteen years is that we have succeeded in returning to our policyholders several millions of dollars in profits and underwriting earnings, and have accumulated several hundred thousand dollars in cash surplus, and the largest sum we ever started with in one company was $10,000.

Now, in addition to having furnished to the manufacturers of our country good indemnity, we have never had in that time to ask an attorney to appear in court for us; we have never disputed a claim; we have never had a proof of loss in our office over night; and in addition to having furnished these profits and furnished this indemnity, we have indirectly been the cause of every manufacturer who buys insurance in the United States getting a lower rate from the stock companies simply because we were in the field and giving competition. There never has been one single instance in our country where the stock companies have voluntarily reduced the rates; they have reduced them only as they had mutual competition to force that reduction. Much is said that mutual companies are not strong, and there is the liability and risk and all that sort of thing; but when you stop to think about it, all the insurance we organize on the mutual or stock plan is mutual so far as the insurance buyer is concerned. Your experience with the Toronto conflagration and ours with our San Francisco disaster is a fair illustration of that. Every time they have heavy losses, who pays for it? The man who buys the insurance; and time and again the stock companies in our country have said, "Well, here is the manufacturer; we need more money; we have had too many losses; the manufacturer must buy insurance; he has to carry it, some of these other fellows dont' have to, but these people do, and we will make them pay it." The result is that they have advanced the rates.

We have organized what we call the National Association of Factory Mutual Insurance Companies, and in connection with that we have an Inspection Department, and that Department is divorced absolutely from the Underwriting Department; and we claim the greatest service we render the manufacturer is that we inspect his risks from three to four times a year, and show him from our experience how to save losses and how to prevent fire. That Inspection Department or organization is at the disposal of this Association and of Mr. Heaton, and we shall be glad to serve and assist you as far as we can in either the Underwriting or the Inspection Department. (Applause.)



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Mr. Ballantyne.—Mr. President, I wish to take this opportunity of tendering to Mr. Perry the most heartfelt thanks of the Canadian Manufacturers' Association for the very able speech which he has just given to us, as well as his very generous offer, throwing open the Inspection Department of his company, and also offering to underwrite some of our risks, if we find that necessary. I therefore have very much pleasure in moving a vote of thanks to Mr. Perry.

Mr. Rowley.—I take great pleasure in seconding that. I have personal knowledge of the fact that Mr. Perry has been of great assistance to Mr. Heaton; and as an outsider I have pleasure in seconding this motion and in saying that I know he has been of great service to us, and I think he will be of further great service to us.

The President called upon the members to signify their assent to the motion in the usual way. The motion was carried by a hearty clapping of hands.

The President.—Mr. Perry, I have much pleasure in tendering to you a hearty vote of thanks on behalf of the Association.

The next item on the programme which is in order is the report of the Tariff Committee. It has been suggested, for reasons which will develop a little later, that the Commercial Intelligence Committee's report be taken at this time, and that the report of the Tariff Commitee follow, and if that is your pleasure, we will take them in that order.

Mr. T. A. Russell presented and read the report of the Commercial Intelligence Committee, which was taken up clause by clause.

REPORT OF THE COMMERCIAL INTELLIGENCE COMMITTEE.

Custom has ruled that all matters not properly referable to one of the other standing committees shall be dealt with by the Commercial Intelligence Committee, and this fact accounts for the number and variety of subjects covered in the following report, which the said Committee has pleasure in submitting :

Foreign Trade.

The returns of Canada's foreign trade for the twelve months, ending June, show another remarkable increase of imports, $354,480,533, for 1907, as against $294,286,015 for 1906. Exports have not increased in anything like the same proportion, the net gain over 1906 being only $1,585,044. Whereas exports of fish, mineral and forest products have actually fallen off, it is gratifying to note that exports of manufactured goods have gone forward from $27,650,278 in 1906 to $28,574,087 in 1907, thus showing that our manufacturers are making progress in their effort to establish themselves in the foreign market.

It is a pleasure to observe the steps the Department of Trade and Commerce is taking to improve our commercial relations abroad. Tariff treaties are said to be under negotiation with Italy, France, and Australia. Subsidies are being freely given to extend and perfect our steamship connections. Valuable trade enquiries are being distributed through the department's Weekly Bulletin, while the Commercial Agents' reports show a decided improvement.

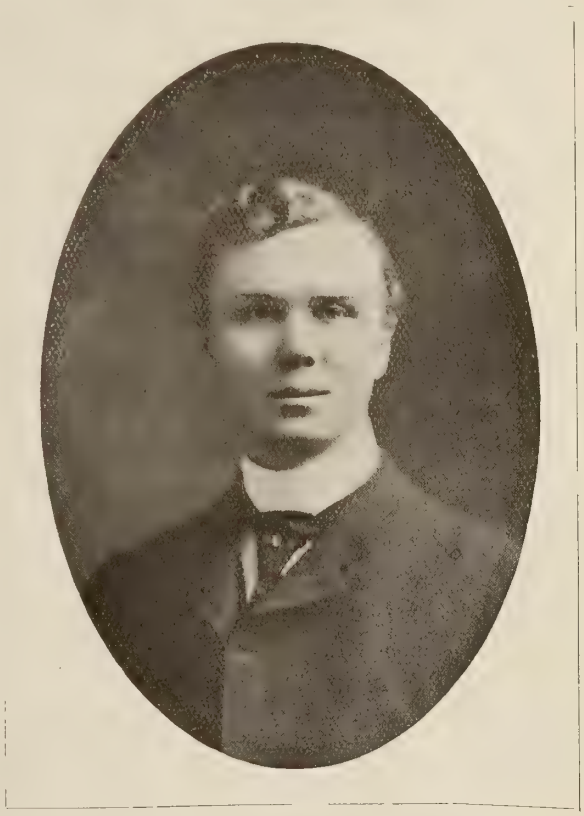
These items, however, form little more than a beginning towards what the department ought ultimately to do in the way of assisting export trade, and it is hoped they will prosecute the good work with vigor.

The West Indian Agencies.

Your Committee believe that some change should be made in the West Indian service. The agents in that territory, four in number, are able to give but very little of their time to the work. Nor could they be expected to do much for the pittance of £50 that is allowed them as a yearly honorarium. Though reputable and well-to-do-merchants, they are much larger buyers of United States goods than of Canadian goods. One of them is said to be the agent of a United States steamship line, while another has recently been reported to the Association as advising the purchase of United States flour in preference to Canadian. It is essential that Canada should be represented in that territory by a Canadian, one who is thoroughly conversant with trade conditions at home, and who is absolutely untrammelled by business connections with the United States. It is recommended, therefore, that representations be at once made to the Government, with a view to replacing the present agents by a new officer who will devote his entire time to the work, travelling about from place to place, and keeping the Ottawa office advised as to changing trade conditions.

Brussels Sugar Bounty Convention.

In 1903 a number of the powers subscribed to an agreement, known as the Brussels Sugar Bounty Convention, the chief purpose of which was to abolish the payment of bounties on sugar manufactured for export. As one result of this treaty the sugar refining industry of the West Indies, once so depressed, has been quite revived. In September, 1908, any of the signatory powers to the convention may withdraw, having previously given one year's notice. With the consent of the refiners and large consumers of sugar represented in the Association, your Committee has expressed to the Secretary of State for the Colonies the wish that Great Britain may continue a party to an agreement that has done so much for a sister colony.



MR. T. A. RUSSELL
(Canada Cycle and Motor Co., Ltd.)
Chairman Commercial Intelligence Committee, 1906-07

Trade Index.

The distribution of the 1906 edition of the *Trade Index* has been continued with care throughout the year, nearly 8,000 copies having been placed in the hands of foreign buyers. No better evidence of the value of this publication could be given than the enquiries for Canadian goods which it is the means of bringing to the Association. This year they are more numerous than ever before. All are being sent on promptly to interested members, who have not been slow to express their appreciation. Financially, too, the book has been a success, having a balance to its credit on July 31st of $1,130.36.

Exhibitions.

As a means of developing export trade the International Exhibition has, during the past few years, come rapidly into favor, and the part which the Dominion Department of Agriculture has played in bringing Canadian produce to the attention of foreign buyers through the medium of these exhibitions, is heartily to be commended. Commencing with Osaka, displays have been sent to Liege, Milan, Christchurch, and Dublin, with results that have been most beneficial to the Dominion at large. It is difficult, however, for the Government unaided properly to care for the interests of manufacturers, and it therefore devolves upon Associations such as our own to co-operate with them in using these exhibitions as a means of advertising Canadian goods in foreign markets.

Inasmuch as five important international events are now in sight, it is recommended that a standing Exhibition Committee be appointed for the purpose of collecting and disseminating information regarding international exhibitions in all parts of the world, and assisting members with the transportation and arrangement of their displays.

Foreign Agents of Canadian Houses.

Acknowledgments are due to Mr. Harrison Watson, of the Imperial Institute, London, for a suggestion which your Committee have since acted upon, and which will doubtless facilitate the handling of trade enquiries by the Commercial Agents of the Canadian Government. No systematic attempt ever seems to have been made to obtain an exhaustive list of the foreign representatives of Canadian houses, and in the absence of the information which such a list would supply, Government agents have frequently had to direct the enquirer for Canadian goods to a Canadian address, while valuable time might have been saved by referring him to an agent nearer at hand.

Some few months ago your Committee made a beginning towards meeting this long-felt want. Circulars were sent out to all members asking them for the names and addresses of their foreign representatives. The replies received were carefully analyzed; lists were prepared, classified according to countries, and each Government officer was supplied with the names and connections of the agents operating in his territory.

While these lists were far from complete, it is known that they have already served a useful purpose. It is recommended, therefore, that they be revised and added to periodically in order that members may enjoy the full benefits to be derived therefrom.

Classification of Imports.

More than two years have elapsed since the Association first made representations to the Commissioner of Customs, with a view to having the classification of imports extended and improved. It will be recalled that in many lines of trade the articles imported have been grouped by the department in such a way as to defeat the very purpose for which the returns are published. It was believed that if consideration was to be given to the real interests of the business community, certain changes were not only desirable but necessary. Your Committee, therefore, worked out its recommendations carefully in detail, and laid them before the Commissioner, who deferred action until the tariff was brought down last winter.

Many of these recommendations have been adopted in the new classification, which was put into effect on April 1st. On the whole, the returns are now in very much better shape, though that further changes will have to be made is evidenced by the frequent requests that reach the office for details which the blue books fail to supply.

Franco-Canadian Treaty.

By the Franco-Canadian treaty of 1893 Canada admits wine, soap, nuts, almonds, prunes and plums of French origin when imported direct at rates varying from 33 to 50 per cent. off the regular tariff, in return for which certain Canadian produce, including canned meats, condensed milk, fresh and preserved fruit, building timber, flooring, wood pulp, paper, wooden furniture and boots and shoes is given the benefit of the French minimum tariff. Since the date mentioned France has negotiated tariff treaties, embracing a great variety of items, with a number of foreign countries, and each time she has taken advantage of the occasion to increase the general tariff as against those countries that were not parties to the new arrangement. Every time a treaty has been made, therefore, with Russia, Italy, or Spain, Canada's possible market in France has been contracted, until to-day her treaty with that country is sadly in need of revision.

The difference between the French general and minimum tariff is now so pronounced that if given the benefit of the latter Canada should be able to do an extensive trade in cured meats, cheese, agricultural implements, carriages, machine tools, sewing machines, and all wooden goods—doors, window frames and joinery. It is likely, however, that France would require a substantial *quid pro quo*, involving such articles as prefumery and toilet preparations, brushes and kid gloves, to which there might be considerable opposition from Canadian manufacturers.

In view of the likelihood of legislation being introduced along this line at the forthcoming session of Parliament, the subject should receive careful consideration at an early date from the new Tariff Committee.

Commercial Reports.

Members are again reminded that the Association has splendid facilities for procuring reports on foreign houses. Arrangements are in effect with mercantile rating firms in England, Denmark, Scandanavia, Holland, Belgium, Switzerland, Germany, Austria, France, South Africa, Australia, the United States, the West Indies and South America, whereby the best report obtainable may be had on any house in any part of the world at a moderate price. A large number of these reports are now on hand, and valuable time may often be saved by consulting the department.

Translation Department.

It has been decided to operate this department on a different basis for the future. Heretofore a small fee has been charged each time a service was rendered. From now on members will be entitled to have 25 letters a year translated from or into French, German, Italian or Spanish free of charge. Letters in excess of 25 will be charged at nominal rates. Expert translators are to be engaged for this work, and members will be given prompt and careful service.

Collection of Accounts.

Your Committee has for some time been considering the advisability of establishing a department for the collection of overdue accounts. There is every indication that the Association could operate to particular advantage in a matter of this kind, and as it would involve no additional expense and might even result in a small revenue, it is recommended that immediate steps be taken to put the necessary machinery in motion.

The following suggestions indicate the manner in which it is thought the work could best be carried on.

1. The engagement of a lawyer, preferably one with experience, who shall not be an employee of the Association, but who shall act under the direction of the Secretary.

2. He shall be known as "Manager of the Legal Department."

3. All his letters in connection with Association work shall be on Association stationery, and signed "The Canadian Manufacturers' Association, per Manager Legal Department."

4. Charges for collection :

A. Accounts of $200 and under, 10 per cent. of the amount of settlement. Minimum charge, $2.00.

B. Accounts over $200, 10 per cent. on first $200, and 5 per cent. on the balance.

C. Authorized disbursements, such as travelling expenses, telegrams, law stamps and special agents, but no charge to be made for ordinary law costs, such as the bringing of suits, etc.

D. When unsuccessful there shall be no charge, except for such expenses as were authorized by the creditor.

5. The manager shall receive 75 per cent. of the commission, but out of this amount he shall pay all his office expenses, excepting the cost of the Association stationery he may use.

6. Applications for the service of the department shall be addressed to the Secretary, and all amounts collected shall be paid to him.

7. Where accounts cannot be collected by the usual methods, no expense shall be incurred without first obtaining the consent of the creditor ; otherwise it shall be borne by the Manager of the Department.

Assignments.

It is proposed that in cases of assignment the department might act for interested members upon request, for it is apparent that one man acting for several creditors could produce better results than if all acted separately.

The charge herein would be governed by the work done and the amount involved, in addition to actual expenses incurred, the total to be distributed among the creditors in proportion to their respective claims.

The value to members of the Association in having the names of slow or weak accounts would be considerable. The strength and protection of the department would increase with experience.

Fraudulent Schemes Exposed.

Twice within the past few months your Committee have felt themselves called upon to expose fraud, once for the protection of members, and once for the protection of the fair name of Canada. The first was a scheme that was being worked from Buenos Ayres to secure goods from Canadian manufacturers by means of worthless drafts on Spain. A circular issued to members, warning them to be on their guard against these parties, resulted in a number of shipments being stopped, thus averting losses, which in the aggregate might have amounted to thousands of dollars. The second was an attempt on the part of a Canadian with a penitentiary record to secure advertising contracts in England for certain Canadian papers by means of gross misrepresentations. In this case full particulars were sent to the High Commissioner for Canada in London, so that he might be in a position to warn the British public.

These items suggest a new field of usefulness for the Association ; a field in which it should be able to operate with great success, if members would make it a point to report promptly all cases of fraud that come to their notice.

Metric System.

In view of the continued agitation in certain quarters favoring compulsory legislation in the matter of weights and measures, a special meeting of the Committee was called to discuss the relative advantages of the metric system and the system now in vogue. Your Committee is firmly convinced that the only way the question can ever be satisfactorily disposed of is to make it the subject of investigation and report by a Royal Commission. The following resolution which has met with the approval of the executive Council is submitted for the endorsement of the Association:

Whereas the Canadian Manufacturers' Association has for some years considered the question of weights and measures, the result being that the Association introduced a resolution at the Sixth Congress of the Chambers of Commerce of the Empire, in London, asking for a Royal Commission to enquire into the most suitable system for adoption within the Empire, and

Whereas the Decimal Assocation of London is advocating the metric system and its compulsory adoption, and

Whereas the British Weights and Measures Association is endeavoring to introduce the "inch" as a unit; be it

Resolved,—That the Canadian Manufacturers' Association reaffirm its resolution asking for the appointment of a Royal Commission to investigate the question of weights and measures; and be it further

Resolved,—That the Association place itself on record as being opposed to compulsory legislation on the subject until



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the Commission asked for has brought in its report; and be it further

Resolved,—That in the opinion of the Association no radical change in the system of weights and measures should be adopted, except after international conference between the English-speaking nations.

Stamped Envelopes.

The last annual report of this Committee referred to the desirability of modifying the regulations governing the issue of stamped envelopes, so as to provide for one or two additional sizes, and at prices more nearly approaching the prices charged in the United States, where a No. 8 envelope printed with the return address may be had for $21.40 per 1,000, as against $22 charged in Canada for a No. 7 without the return address.

While duly recognizing the many advantages of the stamped envelope, particularly if redeemable at its face value in postage when spoiled, your Committee feel that it would be unwise to offer the Government any encouragement to engage in a manufacturing enterprise in which private individuals already have their money invested. Moreover, they believe that, considered purely as a business undertaking, the Government would not be justified in installing the costly machinery

necessary to supply the envelopes asked for. It is recommended, therefore, that the matter be allowed to drop.

The above summary does not by any means exhaust the list of subjects that have engaged the attention of your Committee, though it includes all such as are now ready for report. The work has been full of interest for those who have participated in it, and it is hoped of profit to the membership at large.

Respectfully submitted on behalf of the Committee.

T. A. RUSSELL, *Chairman.* G. M. MURRAY, *Secretary.*

Mr. Russell read sections of report on "Foreign Trade," "The West Indian Agencies," "Brussels Sugar Bounty Convention," and "Trade Index," which were adopted without discussion.

Mr. Russell read section on "Exhibitions."

Mr. Thorn.—I would suggest that the last portion of the section with reference to the appointing of a Standing Committee be left over till to-morrow till the question of amendments to the by-laws comes up. It would be rather awkward to refer to them now.

The suggestion was adopted.

Mr. Russell read sections *re* "Foreign Agents of Canadian Houses," "Classification of Imports," "Franco-Canadian Treaty," "Commercial Reports," and "Translation Department," which were adopted without discussion.

Mr. Russell read section re "Collection of Accounts," and said: I wish to move the adoption of that clause. This is a new department for this Association. It is a department which has been worked with very great success by the National Association of Manufacturers in the United States. They commenced it in a small way some years ago, and it has since grown to be a very large thing with them, and found to be very useful in collecting accounts where the laws vary in the different States, as they do with us in the different Provinces; and in cases of assignments or where there is trouble with a creditor, where several members of their Association are interested, collective action is possible, which in some cases may save loss, and in other cases may expose fraudulent work on the part of the debtor. I want to make it quite clear that the details of the suggested arrangement are really suggestions. We put them in this report so that you might see to what extent it was proposed to go in this direction, but our idea would be to leave the matter free for the Commercial Intelligence Committee to work out, subject, of course, at all events, to the approval of the Executive Council, but to approve of the recommendation here so that immediate steps might be taken to organize such a department, which, I believe, if you did, would become as important a department as Transportation, Insurance, Translation and other departments have become. I move the adoption of this clause.

Mr. Ballantyne.—I would like to ask Mr. Russell a question. It seems to me that you are introducing or proposing something that will place the members of this Association in a very delicate position. Supposing one member of the Association had a bill against another member of the Association and the collection could not be made promptly and he turned it over to the Legal Department of the Canadian Manufacturers' Association, would you have this Association get mixed up beween one member and another?

Voices.—No, no.

Mr. William Robins.—Mr. President, on general principles I seriously consider the advisability of this Association going into any such thing as that. Not only do I think we would be unnecessily scattering our efforts, but I venture the opinion that already there are two very efficient organizations for this purpose; and I happen to know that one of the most important means which the existing large commercial agencies have of recompensing their army of correspondents who furnish them with their information is through their collection department. Many years ago I was a confidential man for R. G. Dun & Co. I know something of the work of those institutions, and I know if that great agency had had to pay its army of correspondents only $5 a year apiece on an average, it would have taken more than the entire profits of the concern. I think on every ground we would be making a great mistake to enter upon anything like that. I move in amendment that that recommendation be not adopted.

Mr. E. G. Henderson.—I have great pleasure in seconding Mr. Robins' amendment. It seems to me it would be a most derogatory thing for this Association to turn itself into a debt collecting agency. While it is quite true that this gentleman to be appointed is not to be an officer of the Association, yet he is to use the Manufacturers' Association's stationery. It is a very nice thing to have the Association turned into a dunning association! I think we would do far more damage to the Association than any good we would do to the individual member.

Mr. James Kendry.—I fully concur in the remarks of the gentleman here, and add that if this Association is to branch out in all the different lines we have before us to-day, I think its usefulness will be gone. The idea when this Association was formed was to have a tariff Association. We are branching out into many lines, and I think, so far as this Association is concerned, we are going to drift away from the interests of the Canadian Manufacturers' Association. I certainly endorse the sentiments of the gentleman who has just spoken, that we should not become a collecting agency. (Applause.)

Mr. McGibbon.—I was not going to speak on this subject, inasmuch as I happen to be interested financially in a company doing the work that this Association now proposes to do. Still, I shall try to forget that fact, and express my opinion, that it would be suicidal for this Association to extend its operations any further at present. The Association, in my opinion, should be broad minded, and be able to carry through to a finish anything it undertakes. I think if you keep on extending in small branches of work of this kind you are simply going to antagonize every interest in Canada against that of the manufacturers. I therefore concur in what these gentlemen have said. In my humble opinion it would be suicidal for this Association to engage in any work of this kind.

Mr. Russell.—The Committee has given some thought to this subject, and it might be well to mention some of the points which weighed with them. In the first place, it is not a departure that this Association is taking without precedent. It is a department which has been organized and carried to a great success and considered one of the most successful branches of the National Association in the United States, and it has not been considered beneath the dignity of that large organization to assist some of its members, not as well and favorably situated perhaps as other members, to collect their accounts, where assistance was needed. It is all very well for one man to get up and say that the tariff is the whole issue. It is not. This Association is too big for that. There are some men and some businesses to whom the tariff is the whole issue. There are some men and some businesses to whom transportation is the whole issue; there are others with whom insurance is the main issue. We are such a large organization, and our interests are so varied, that we have to hold our membership and gain our strength by not assisting one man simply because the tariff is his whole business, but by assisting our members wherever they need assistance, so long as it is consistent with the proper management of the Association. The President of the United States Association told us that they have no trouble with one member endeavoring to collect from another. If it is between two members of

the Association, it is a matter for dispute as to accounts, and this can be adjusted; or if the other member is not solvent, is not able to pay it, then he should not be a member of the Association. It is very well to urge that these departments are going far afield. The same has been urged about insurance. No Committee had much more strenuous opposition than the Insurance Committee, but you see the culmination of that Committee's work to-day. There is hardly a member who does not hold up his hands in support of it. The same holds true in the case of transportation. There were many members of this Association who thought that they could do better with the railway companies individually than if they worked through the Association as a whole. The members of this Association do not believe that to-day. So your Committee who have looked into this question believe that good work can be done, and that they will not commit the Association to any great extent, and will render assistance to many of its members. The Committee are a unit in suggesting that their recommendation be put into effect.

Mr. McGibbon.—My opinion is that a halt has to be called some time to the extension of the work of the Association. It is a pretty big thing, and there is no reason in the world if this goes through why somebody should not propose that we organize a bank to loan the Association money at a lower rate of interest than the regular banks.

A Voice.—A good idea. (Laughter.)

Mr. J. F. Ellis.—This is apparently a live question. I believe that we should discuss it candidly and carefully, and I do not think we have the opportunity of doing that this afternoon. I would not like to see this resolution voted down; I think it is worthy of consideration. It has received a great deal of consideration from the Committee, and I think we should perhaps lay it on the table, but not vote it down altogether. I think it ought to come up again and have fair and full discussion, and it cannot have that this afternoon.

Mr. Kendry.—I move, Mr. President, that we put that off for a year, till the next meeting of this Association.

Mr. Robins.—Where will we be then? This idea of closing our eyes and shunting a thing forward is poor policy. The proposal is either a good thing or a bad thing. Let us decide. If we cannot do it to-day, let us do it by means of a canvass of the Association through circular or in some other way. I quite agree with Mr. Ellis, that we should not negative the proposition of a Committee which has given its serious consideration to the matter, but for my part my mind is fully made up that we don't want that sort of thing in the Association.

Mr. J. P. Murray.—I think you will find in the report that this will be submitted later on to the Executive Council. Let it be discussed as much as you please, but I don't think it is very complimentary to the Committee, which has given an immense amount of time to its consideration, to scratch it off the book entirely. We are asking the Association to put this matter in such a position that the Executive Council which you are going to elect can deal with it. If this Association is not going to have confidence in the Council it elects, it had better not elect one, but do the whole work of the Association in convention. The work of the Association at present is all done by the Committees, and by the hard work of the Committees, too, and in this particular matter the Commercial Intelligence Committee had many a session and devoted a great deal of thought to it. I certainly think that the members of the Association in convention here should allow the Commercial Intelligence Committee to go on with the work it is doing, and submit its report to the Executive Council for its approval or condemnation.

Mr. E. G. Henderson.—I rise to a point of order. Is this large body to be lectured here because it chooses to criticize the report of a committee? If that is so, the sooner we stop calling together the annual meeting the better. I object to the remarks of Mr. Murray. If it is the Committee that is to decide, we don't want large bodies here; we simply want the Committees.

Mr. Kendry.—I think we ought to take the vote of this assembly here to-day, and this is the proper place to settle a question of this kind. So far as the Committees are concerned they bring those recommendations to us, and we have a right to vote them down or do as we think proper. I think this is the proper place to vote on the resolution.

The President.—Following parliamentary procedure, we will in future just allow one speech from each member on the subject.

Mr. Thorn.—We greatly appreciate the work that the Committee has done, but the matter is up for consideration, and now is the time to say what we feel in connection with this particular item. So far as I am personally concerned, I greatly regret having to oppose the recommendation of the Committee. Still, I think it would be a mistake for this Association to enter into the collection of accounts. There are agencies for that purpose now that are certainly giving very satisfactory service; the accounts are being collected promptly and the amounts paid over, and even upon more favorable terms than are proposed here. I really think it would be a mistake to enter upon work of this kind, although I greatly appreciate the work the Committee has been doing.

Mr. W. Cauldwell.—I quite agree with the remarks of the gentleman who has just sat down. I think it would be a great mistake for the Association to go into the business of collecting accounts. If this were adopted I, for one, would feel bound to send any accounts we wanted collected to the Association. There are many accounts I would not care to send here if we established this department. As it is, we have many companies throughout the country who collect accounts very satisfactorily. We don't know where the expense of such a department would end. I, for one, appreciate the work of the committee. I would, therefore, move in amendment to the amendment that the Committee be allowed to proceed and formulate a plan and report at the Convention to be held one year hence.

Mr. Fortier.—I second the motion.

The President stated the amendment to the amendment.

Mr. Robins.—We are told already that the Committee is unanimous. What is the adoption of this amendment going to result in? If the matter is not going to be disposed of now, should it not be referred to the Executive Council?

The President put the amendment to the amendment, which was lost.

The President put the amendment, that the clause be stricken out of the report. This was declared carried.

Mr. Russell read sections of report on "Fraudulent Schemes Exposed," "Metric System," with the resolution contained therein, also section *re* "Stamped Envelopes," which were adopted without discussion.

Mr. Russell moved, seconded by Mr. J. P. Murray, that the report as amended be adopted. Carried.

The Secretary made the announcements.

The President.—The next item is that of the report of the Tariff Committee, to be presented by the Chairman, Mr. W. K. George.

REPORT OF THE TARIFF COMMITTEE.

Mr. George presented and read the report of the Tariff Committee.

Since our last annual meeting the revision of the tariff, which was so anxiously awaited from the Government, has been brought down, and your Tariff Committee regret exceedingly that the new tariff does not embody more of the recommendations which were made to the Government by this Association.

At the inception of the Manufacturers' Association, the tariff question was the most important problem to be dealt with, and, in the opinion of your Committee, it has remained as the one subject which must at all times be kept uppermost in the councils of the Association.

Canada is as yet a young country, with great possibilities and vast resources, and in order that her development may be properly achieved by the establishment of industries which will utilize her resources and furnish employment to her people, it is imperative that she should have a tariff which will furnish sufficient protection against either the cheaper labor, or the more highly specialized and fully developed industries of her competitors.

Since the revision of the tariff in 1896 the policy of this Association has been (1) to deal with the tariff as a business problem apart from party politics; (2) to impress upon the Government, through every available means, the point of view



MR. W. K. GEORGE
(Standard Silver Co., Limited)
Chairman Tariff Committee, 1906-07

of the Association in desiring to build up Canadian industries and provide employment for Canadian artisans, and (3) to educate public opinion, both in the cities and in the rural districts, to realize how essential this policy is for the complete development and continued prosperity of the country, and to obtain public support for a protective policy, no matter by whom it should be advanced. We believe that the country, as a whole, is imbued with the idea that Canadian industries must be protected against the products of cheap foreign labor and specialized industries. We also believe that the public realizes more than it has ever done before, that the industries of Canada are providing a large and valuable home market for the products of the farm, and that everything should be done within reason, which will develop them.

In our efforts to impress our views upon the present Government, we have met with only partial success. The tariff which was brought down last winter, is largely a compromise measure. It is a source of satisfaction to manufacturers to know that the party in power, which was originally a low tariff or free trade party, has, under the responsibility of office, seen how impossible such a policy is if Canada is to continue her progress as an industrial nation. At the same time, we feel that the Government has either not realized how essential it is in the case of many industries (which are even now, in these most prosperous times, feeling keenly the effects of foreign competition), that they should receive more adequate protection, or, if they have realized it, they have not had the courage to put such a policy into effect.

We recognize fully the measure of success and development which has attended many of our industries during the last few years, but we recognize at the same time the exceptional conditions which have prevailed during this period throughout the entire industrial world. In every country trade conditions have been unprecedently good, so that with prosperous and busy times at home the foreign manufacturer has not felt the same necessity for unloading his surplus stock upon the Canadian market. This lack of extra severe foreign competition, combined with the phenomenal development going on in Canada, has produced temporarily a condition of affairs satisfactory to many lines of industry. Under these conditions we are not surprised to learn that since 1901 the output of our Canadian factories has increased by 48 per cent., but it is rather startling to know that even then they are not growing proportionately with the growth of our country, and that during the same period our imports of dutiable goods have increased by 53 per cent., and further, that a trade balance, exclusive of coin and bullion, in Canada's favor in 1901 of six million dollars, has been converted into an adverse balance of one hundred and four million dollars for the year ending June 30th, 1907. Figures such as these are fraught with deep significance, and "settlement day" cannot be explained away by any fiscal theories.

As a Tariff Committee, we do not believe it would be in the interest of the manufacturers of this country to raise a hue and cry for increased protection for every Canadian industry. Some have sufficient protection to-day, others only very inadequate protection.

Our aim has been to secure, first, a tariff which would furnish relief to industries now suffering from unequal competition, and, second, a tariff which would not only encourage a reasonable development of industries already in operation, but would also serve as an incentive to investors to establish new enterprises.

We believe that the words of the Finance Minister of Canada, in speaking of the position of the manufacturers on the tariff question, (is) correct, in other words, that "eternal vigilance" must be the watchword of the Association in dealing with the tariff matter, for undoubtedly the manufacturers of this country, in many lines, did not receive the consideration they should in the tariff of 1907. Instead of being disheartened, however, we believe the Association should be encouraged by the adoption, by what was originally the free trade party of Canada, of a tariff which is protective in its principle, and that we should not relax our efforts to secure the application of the same policy of protection in those lines of manufacture which do not enjoy it to-day, and which, in the interest of Canada, should be developed in our midst.

We believe that, as in the past, our attitude on this question should be entirely outside of party politics, and that our efforts should be to deal with the question along business lines, and in the interests of all the industries of the country, and to this end we would recommend that the new Tariff Committee begin its work immediately after the close of this convention.

Regarding the intermediate tariff the Association is on record to the effect that "it is an innovation which will stand as a continuous invitation to countries competing with Can-

ada to negotiate with a view to having it made effective. If the same should at any time become operative in favor of any of Canada's principal competitors, it would deal a blow to Canadian enterprises, and prove disastrous to many lines of industry. The Government is given authority to make the same apply to any foreign country without receiving the consent of Parliament, and as long as Canada's development is menaced by the unknown possibilities of such a tariff, capital will remain timid, present industries will not be developed, nor will the establishment of new ones be encouraged."

The Australian Tariff.

With reference to Canada's relations abroad, it is to be regretted that our Goverment did not succeed in effecting a reciprocal preferential tariff with Australia. The tariff recently announced by the Commonwealth Parliament commits Australia to the principle of an Imperial preference, without admitting Canada to the benefits of the same.

Without questioning the right of Australia to protect her own interests, your Committee feel that, by virtue of the fact that Canada was the first to raise the standard of Imperial preference, we ought to be accorded equal privileges in the Australian market with our fellow-subjects from Great Britain. Given such a preference we could secure a large share of the business that is now going to the United States, as the lines which these two countries produce are almost identical, and are of a kind that Australia requires.

The following resolution voicing the views of the Association has been placed in the hands of the Government :

"Whereas the Australian Commonwealth Parliament has recently announced the adoption of a new tariff wherein it definitely commits itself to the principle of an Imperial preference by virtue of the concessions it has allowed Great Britain, and

"Whereas Canada has not yet been admitted to the benefits of this preference; and

"Whereas its application to Canada would undoubtedly be the means of securing to Canadian manufacturers a large share of the business now being done by United States houses; be it

"*Resolved*,—That the Executive Council of the Canadian Manufacturers' Association urge upon the Dominion Government the great importance of effecting a preferential tariff treaty with Australia at the earliest possible moment upon terms that will enable her to share the advantages of that market equally with other parts of the Empire. And be it further

"*Resolved*,—That the Government be urged to leave no stone unturned to have Australia withhold the application of the new tariff to goods that were actually in transit at the time the tariff was announced."

While there seems to be little hope that the duty will be withheld as against goods in transit, your Committee is assured that the Department of Trade and Commerce is sparing no effort and no expense to secure the benefits of this preference to Canada.

Franco-Canadian Treaty.

Your Committee have followed with interest the announcements regarding the proposed extension of the Franco-Canadian treaty of 1893, but in the absence of any official statement as to the items which it is proposed to include within the scope of the new treaty it has been impossible to take any action. The matter will be carefully watched, however, with a view to seeing that Canadian interests are properly represented when the amended treaty comes up for ratification in Parliament.

All of which is respectfully submitted.

W. K. George, *Chairman.* G. M. Murray, *Secretary.*

Mr. George.—Before moving the adoption of the report, I think it might be well to put another motion. It has in the past been the desire of the Annual Convention to consider the Tariff Committee's report in private session. That has usually been done. I don't know whether it is the desire of this meeting to do so or not, but I think it would be well to test that feeling, and I will move first in relation to that, that the Tariff Committee's report be considered in private session.

Mr. Ballantyne.—I have very much pleasure in seconding the motion.

Mr. Ransford.—I do not see that we have anything to say about the tariff that we do not want the world to know. I bow with all deference to the superior wisdom of others, but in this case I don't see the superiority of the wisdom. I think, gentlemen, that the more we make our voices heard and the more publicity we give to our consideration of the tariff question, the better it will be for us. If we do not, to what



MR. W. R. DUNN
(The International Harvester Co., Limited)
Chairman Railway and Transportation Committee, 1907-08

do we lay ourselves open? We lay ourselves open to slurs of this kind: "The manufacturers met behind closed doors;" you will see that in the columns of the *Globe* to-morrow morning: "They are practically afraid to let their voices be heard, and they do it in secret," and all this kind of abominable politicians' language. The sooner we speak with no uncertain voice and the more public we make our voice, I submit, the better. Therefore, I shall most certainly oppose the motion.

The President put the motion, which, on a vote having been taken, was declared lost.

Mr. Ballantyne.—I might say that while it has always been the custom to meet in private, nevertheless I am perfectly willing to bow to the wish of the majority.

Mr. George.—I might say also that I quite agree with what Mr. Ransford has said. It has been the procedure in the past, and it was felt it would be well to afford the meeting the

opportunity of doing the same this year. I bow to the will of the majority.

Mr. George moved, seconded by Mr. Chapman, that the report be adopted.

Mr. Henderson.—I want to move in amendment that about a dozen words be struck out. I refer you to the first clause, on page 63, which reads as follows: "We believe that, as in the past, our attitude on this question should be entirely outside of party politics, and that our efforts," and so on. I wish to move that the words between "believe" and "efforts" be struck out. My object in moving that those words be struck out is this. We have for the last eight years been telling the politicians of this country that we won't introduce politics into the discussion of the tariff. It seems to me it is rather a jug-handled affair. Will any sane man in this room tell me to-day that the gentlemen charged with the revision of the



MR. JOHN TURNBULL
(The Nasmith Co., Limited)
Chairman Parliamentary Committee, 1907-08

tariff dealt with the tariff as a business proposition, or did they deal with it as a political proposition? That is a question I should like to have answered. We say, "No, we won't introduce politics," but they do. It is not fair. We have been talking about what the labor organizations are doing. Why is it that they are listened to? Is it because they are a more powerful body than we are? I don't think so. The finished product of labor is what a man can do with his hands. The finished product has come into this country very rapidly indeed in the form of importations of Orientals and Hindoos. What did organized labor do when they saw their business being interfered with? I saw in the *Globe*—I suppose it is correct—a commissioner is going to be sent to Japan to try and keep them out. They will be protected, but we won't get protection.

I wish to state here that I quite agree with the report. I think it is one of the best reports that the Tariff Committee has ever submitted to a Convention. I strongly commend the Committee for bringing it in, and I do not wish to find fault with them in any particular. I commend them for saying that there are several industries in Canada that do not want higher protection. I don't think this Association has ever claimed that a general division of everything in Canada should take place, but we do want to put some industries in such a position that they won't be driven out of business, and as things exist now it seems to me there are some that will be driven out of existence unless they get a proper measure of protection. I move, seconded by Mr. Kendry, that those words be struck out of the report.

Mr. Fraser.—I think it would be a great mistake to strike those words out, because the only thing we can infer is that this Association does want to run its business along political lines, and if that is the case I, for one, would withdraw from the Association.

Mr. Henderson.—It rests with the individual whether he is going to make the tariff a matter of politics or not. It does not embroil the Association at all.

Mr. Fraser.—This is the declaration of the Association, and if we leave this part of the report out we can only infer that the Association in future is going to take an entirely new position.

Mr. Gurney.—When I rise to address an audience like this the presumption in the mind of every Grit in the room is that now we are going to hear from an old Tory, and therefore we must discount him just one hundred per cent. Now, I proclaim myself here to-day an independent in politics. I think that there is nothing in this country that we need so much as independent men in politics. On more than one occasion I have said to some of the men who are here to-day that something owns everybody in Canada. A labor man is owned by a union, and half a dozen leaders vote for it; the Manufacturers' Association members are owned by the Manufacturers' Association and the Executive vote for them; the individual Reformer in this country is owned by his party absolutely, and the Tory by his. A man is a churchman, and he is owned by his church. Individualism is almost lost in the country, because we lack good, robust manhood.

Now, Mr. Chairman, of all the foolish things in my business experience the most foolish is the statement that the tariff should be taken out of politics. Will you tell me what there is in politics that is distinctive in this country outside of the tariff? What is there in the United States to-day, outside of the tariff, that you can call politics at all? Let us be wise enough to recognize that the one thing that is of any significance in our politics to-day is the tariff. It does not simply mean protection on your product and mine; it means finding employment suited to the boy in my family who is not fitted to be a fisherman or a farmer. Men are born with certain aptitudes. I say, sir, that nothing is so important to this country as to keep the men of first-class ability in this country, and we cannot expect to do it if we say that the tariff is not the politics of the country.

Now, I don't want to say anything offensive of either party, or of the Government, or of the Opposition, but I do say that every man in this room should take sides on this tariff question, and I say that this Association should take an unequivocal position with reference to it, so that we may know that this Association is a high tariff organization.

I am not speaking for any particular industry, but it is a matter of awful significance to me that this body of men here present, because they are taken care of individually for the moment themselves, should care nothing that the large amounts of capital invested in the woollen industry in this country have been lying idle for years. (Hear, hear.) I sat down in a body of business men who are represented here to-day, and when these tariff schedules came out, what did we do; we looked down and said, "Why, stoves are taken care of;" and I was happy, and smiled, and went away from the meeting. Now, sir, that is not the attitude this Association

should take. We should look down that schedule and find out who is hurt, and we should go to Ottawa and never let up until that industry is taken care of. The attitude we have taken is pusillanimous, it is mean, it is not worthy of us as individual business men.

I want to say another thing; what we want to do in the future is to instruct the Tariff Committee that until every industry—not mine, not yours—but until every industry in the country, is adequately taken care of, the politics of this Association really is tariff. (Applause.)

The Woolen Industry Suffering.

Mr. Kendry.—Mr. President and Gentlemen,—I quite concur in the remarks of our friend, Mr. Gurney. We are here as the Canadian Manufacturers' Association, and we have a duty to perform. We are here to look after the interests of any industry that needs protection; it makes no difference, Mr. President, whether that industry is iron or leather or anything else.

Now, sir, it may be stated that I am interested in the woollen industry. The woollen industry is one of those that have suffered, and I say this Association has a right to protect and to help it. What is the condition? Out of one hundred and odd mills, nearly one hundred mills have gone out of existence. I can tell you the mills all over this country, operated on both small and large capital, which have been closed, and I can count on my fingers the mills which are left. We have come before this Association, we have come before the Ministers at Ottawa, we have made a good case; but while we have done that, we think that this Association has not backed us as strongly as it should; because I agree with Mr. Gurney, that no matter what that industry is, we are here to protect or help protect it. You have got one industry nearly wiped out, and there may be, and there will be, others.

What do we find here by the report of the President of this Association? That our imports have increased fifty-three per cent. The balance of trade against us is one hundred and four millions of dollars. How long can we stand that, gentlemen? How long will we go on with a deficit of that kind? What do we find in this woollen industry? Ninety per cent. of the woollen goods consumed in this country is imported into this country, and it is made by cheap labor in England, Germany, and other countries. What do we find? We look to our neighbors in the United States, and ninety-five per cent. of the goods they consume is made by the people in the United States. We just reverse the whole thing.

Now, Mr. Gurney knows, and a number of gentlemen here know, I know, and the President of this Association knows very well, the industries which have gone out of existence. Where have the workmen gone? Year after year we have been spending from seven to eight hundred thousand dollars bringing immigrants to this country, and where do we find these people who have been working in our woollen industry? We find them busy in the Eastern States, and all over the United States. One gentleman has said that the tariff is not the only question, but I say that the tariff is one of the principal questions that we have before us to-day. In my politics I believe like Mr. Gurney. Whenever any Government, no matter whether it be Tory or Grit, goes against the interests of this country, I am going to vote against it. Such ought to be the policy of every one of us.

Take the different towns in the country, Waterloo, Hespeler, Carleton Place, Montreal and Cornwall, for instance. In all these places the woollen industry has gone out of existence. With its policy of not protecting that industry, the Government has wiped it out, and those municipalities have lost their particular interests.

It may be said that I am speaking in my own interests; but I think I have a right to speak in my own interests; all the capital I have is invested in that industry, and in an effort to carry it on I have lost thousands of dollars. I know of concerns that have lost $500,000. Is this Association not going to take a hand and help us to put that industry where it belongs? Some will say that this industry has thirty per cent. protection. I grant you that; but the goods which come into this country to-day, what are they? The cheapest class of goods, made up of rubbish of all kinds. The Canadian manufacturer to-day makes a better class of goods for the price than the English manufacturer. But we find the clothing people of this country going to England to buy their goods. They give us no preference. They don't care whether the goods wear or not—whether they are intrinsically good or not; they want to sell a suit at a certain price, and they go to England and buy the cloth because it is cheap.

Moreover, I am paying fifty per cent. more for labor to-day than I did seven years ago. Who is getting the benefit of that? The labor people of this country. But English labor has been at a standstill, and that is exactly why we cannot compete with them. We must have a tariff to cover this difference, if we are to exist.

This is a vital point with a good many of us who have our capital invested in the woollen industry. I was very sorry to hear one member of this Association say that if we were going to bring politics into the Association, he would withdraw.

Mr. Fraser.—I do not mean politics; I mean party politics.

Mr. Kendry.—That is all right.

I could say a great deal more, but as there are other gentlemen here who want to speak, I thank you for the very kind hearing you have given me, and I hope this Association will go on in the same lines as it has in the past. I am opposed to its branching out into too many things. I think we are met here for a certain purpose. Do not let us lose sight of the main object. The main object of this Association, I hold, is the tariff.

Politics and Party Politics.

Mr. Robins.—There has just developed precisely the remark I was going to rise to make—that is, the great distinction between party politics and politics. My conception of the word "politics" is the interests of the country. My conception of the words "party politics" is party first and country second. I disagree with my good friend, Mr. Henderson, as to the elimination of the words which he proposes to strike out. Because I disagree on that and believe this Association should not introduce party politics, I beg leave to move that the word "either," in the last line on page 61 (Book of Printed Reports), be stricken out, and after the word "not" there be introduced the word "fully," and all the words from the word "or," in the fourth line on page 62, to the end of the fifth line, be stricken out. The sentence would then read thus: "At the same time, we feel that the Government has not fully realized how essential it is in the case of many industries (which are even now, in these most prosperous times, feeling keenly the effects of foreign competition), that they should receive more adequate protection." To leave these other words there, would savor of party politics. This is my reason for making this motion.

Mr. J. F. Ellis.—Would it not be better to dispose of the amendment that is already before us. In reference to this matter, I am sorry that the Tariff Committee is not a unit in this report. I supposed there was a unanimous report, as there was no minority report brought in. I feel sure that this committee for the last few years has worked as earnestly as any committee of the Association to further the interests of the manufacturers of this country. The members have done all that they possibly could by interviewing the members of the Government and pointing out to them the wishes of this Association and the wishes of the membership of this Association individually. They have gone there representing the

Association as a body. They have also gone there representing individual interests, and I fail to see why the Tariff Committee should be condemned in any measure for what it has done in the past. I think the report as brought in by the Tariff Committee is a wise, statesmanlike document. I think this Association would make a great mistake if they changed it even in a single sentence.

Mr. Gurney.—I rise to a question of privilege. I am a member of the Tariff Committee. The Tariff Committee, in making its report, was held down to the basis that was proclaimed by this Association, and that is that politics and tariff are not synonymous terms. The committee could make no report along any other lines. What I take exception to is not the report of the committee, but the whole attitude of this Association. What I would like to have would be the co-operation of every member of this Association for the common interest as against the world. (Hear, hear.) Establish that principle, and your Tariff Committee will come in with a very different report next year.

Mr. Dick.—I would like to call attention to two slips which, I think, have been made in two very important speeches. Mr. Gurney made a most important speech, most valuable to us, but he used the words "high tariff." I would like to know if he did not mean "higher," or "high enough"? Perhaps he made a slip there. I think Mr. Kendry used the words, "we have one hundred mills and one hundred mills wiped out."

The President.—He said, "one hundred and odd mills."

Mr. Gurney.—I think I stated in the course of my speech that some industries with which I am associated are sufficiently protected, but I used the woollen industry, not because I am interested in woollen goods—I haven't a dollar of interest in it—but as an illustration of the generic fact that industries may be wiped out in this country without the fact being recognized either by the Government or by the Manufacturers' Association. I said "high tariff"—yes, make it as high as Haman's gallows, if it is necessary, to keep the Yankees out.

Mr. R. J. Younge.—I presume we are discussing chiefly the amendment first made by Mr. Henderson. Speaking of that, I feel that if that amendment is carried, it will not bring about the good results which Mr. Henderson has in view. To remove the tariff question from the realm of party politics is in reality what any good Canadian wants to do. In other words, we want to be Canadians first and politicians afterwards. If we can have the feeling and the mutual confidence in each other as members of this Asesociation that that ground is being taken, and that no matter which party is in power, so long as it is not doing justice to the industries of this country, that we will stand together as manufacturers and oppose it until the wrongs are righted, then I feel we have removed the question of the tariff from party politics. But if we leave the tariff as a party political question we are back where we were years ago, with every Liberal supporting the Liberal Government because it is a Liberal Government, and every Conservative supporting the Conservative Government because it is a Conservative Government. So that I feel the report as it stands is a strong expression from this Association, which will in the end bring us the results which we need from the Dominion Government.

Mr. Ransford.—Mr. President and gentlemen, I trust that no member of the Tariff Committee will think that the individual members of this Association do not fully and highly recognize the value of their work. I think I am voicing the opinion of all present when I say that we do value highly the result of their work, and that any criticism that may be given of this report must not be taken in the spirit that one speaker expressed when he intimated that in so doing we were captious and finding fault with and were belittling the work of the committee. I was exceedingly glad to hear the remark that fell from Mr. Gurney with regard to every member of this Association in this matter, regarding it as devoid of party politics. I am a Tory born and bred—I don't use the word Liberal-Conservative, because I regard it in the light of one of those subterfuges that are so common in the present day; I would very much prefer the old-fashioned word "Tory." At the same time, although I am that, I want to tell you how far I have advanced in what I consider the road to improvement. On one occasion when the Hon. Israel Tarte was up at Goderich he came out publicly and announced that he was in favor of protection. I, a Tory, so far forsook old lines as actually to accept an invitation to a supper that was given in his honor, and to sit at the same table cheek by jowl with a Grit Cabinet Minister. I need not tell you that it was not an easy pill for me to swallow, but I made it public at the time that that was the position hereafter I was going to take. The Government that protects the industries of this country—that Government I will loyally support. May I, in closing these few words, humbly suggest that the Tariff Committee get into the field of practical results? I have been a member of this Association for some years, but so far as my particular industry is concerned, I have yet to see the slightest modicum of advantage that either years of associationship or the giving of my little money to these matters has afforded me. I have, gentlemen, not received one solitary iota of benefit from having been a member of this Association for years so far as any advantage to my particular industry is concerned. I do hope that in the future the Tariff Committee will go into what I have called the field of practical results, and that next year, or perhaps in two years, if I am spared to be present at a meeting of this kind, I will be able to do what I have never been able to do before, to congratulate the Tariff Committee upon some practical result with regard to my particular industry.

Mr. George.—Might I say, in reply to what Mr. Ransford has said, that, bad as he may be now, he might have been a great deal worse. I just want to explain that, by this statement; a gentleman, an officer of the Government, told us that we might congratulate ourselves on the work we had done; that unsatisfactory, perhaps, as the result was, as shown in the new tariff, had it not been for the energetic work of the Association, the hard work of the committee and the strong presentation of the cases, the results would have been infinitely worse. That is simply the statement of a gentleman who was connected with that commission, and knew the whole ins and outs of it.

I am glad to see that there is a good deal of unanimity in regard to the report. I think that all the features which were brought out by the different speakers are covered in the report. We were told that the tariff should be still considered an imporant part of the Association's work. If you will read the second clause, you will see that we say we consider it at all times must be kept uppermost in the counsels of the Association. You say that assistance should be given to suffering industries. We have made that especially important in the report. We believe that the Tariff Committee and the Association should exert every bit of their energy and efforts to secure that assistance and that improvement in the conditions of those industries which are now suffering under present conditions.

I do not like to disagree very much with my friend, Mr. Gurney. I know he likes his joke. But in justice to the committee, I think I might say that that was not exactly the way in which the committee received the report of the issuing of the new tariff—not simply looking over it and seeing whose industries were benefited and then smiling and going home. I think it was very different to that.

Mr. Gurney.—I beg your pardon. I didn't refer to the Committee. I said a party of business gentlemen sitting down.

Mr. George.—I thought you had reference to the committee. The committee, as you know, did issue a statement,

expressing its regret at the manner in which the tariff revision had been dealt with.

I am glad that the question of politics has been cleared. I think every one of us recognizes that the tariff must be a question of politics, but we have tried to keep the Association from being divided and carried into the two different camps, as has been the case in the past, and probably would again, if we made it a matter of party politics. Each individual can do as he likes. He can use his efforts and see what he can bring forth the next time he has an opportunity of dealing with the men who will have to do with the next revision of the tariff.

At the request of the President, the Secretary stated Mr. Henderson's amendment.

The President put the amendment, which, on a vote having been taken, was declared lost.

The Secretary then stated Mr. Robins' amendment.

The President put the amendment, which was declared lost.

The President put the motion to adopt the report. This was declared carried.

The Secretary made the announcements.

5.15 p.m. the Convention adjourned to meet Thursday, September 26th.

THE TRIP TO LAMBTON CLUB.

The hum of many voices was heard in the balcony of the King Edward on Wednesday afternoon as the hour for the tally-ho trip to Lambton approached. The fame of the Association conventions is having its effect in the ever-increasing number of wives and daughters who are attending.



Lambton Club

The ominous clouds which overcast the sky at noon had no terrors nor did the chill winds which blew discourage any from taking in the trip. Almost every lady of the party was present when Mr. Brush lead the way to the carriages at two o'clock.

An enjoyable drive through business streets, residential avenues, and park roads brought the party to the charming home of the Lambton Golf and Country Club. The club house is ideally situated on the top of a hill which recedes in terraced slopes to the valley of the Humber. Mrs. S. R. Hart received the guests and the warmth of her hospitality soon overcame the effects of the weather's chillness. Two big roaring grates crackled merrily and cast a ruddy glow of warmth about which was most acceptable to the visitors. Tea was served in the spacious reception rooms.

After an hour, which passed all to quickly, the carriages were brought around once more and the return trip began. If anything the journey back was more enjoyable than the trip out. The route lay through High Park, and the leaves were bright with their autumnal colors. It was the time of year when nature takes on her most gorgeous hues. The winding park roads through valley and hill reveal a succession of surprises which captivate the imagination. The afternoon was one of great enjoyment to the party.

THE THEATRE PARTY.

On Wednesday evening the visiting members were entertained at a theatre party in the Royal Alexandra. The boxes, ground floor and a large section of the first balcony were reserved for the Association and its friends, and every seat was taken. That most humorous of comedians, DeWolf



Royal Alexandra Theatre

Hopper, and his competent troupe, were the attraction, in a pretty and mirth-producing play, "Happyland." To the ordinary enjoyment of the play was added the pleasure of the social side. It was an occasion where everyone had a chance to see his friends, and the evening was thoroughly enjoyed. The boxes were occupied by the prominent officers of the Association, including Hon. J. D. Rolland, Mr. and Mrs. Harry Cockshutt, Mr. and Mrs. C. C. Ballantyne, Mr. and Mrs. Ed. Freyseng, Dr. and Mrs. Morin, and others.

After the first act Mr. Hopper was called before the curtain, and in response to enthusiastic applause, made a humorous speech, introducing the names of a number of well-known members of the Association. The points were quickly seen by the audience, and were enjoyed not more by the members at large than by the subjects of the jokes.

After the conclusion of his speech Mr. Hopper, on behalf of the Entertainment Committee, presented Mr. R. A. Donald



The King Edward Hotel

with a bouquet of roses. Mr. Donald, in graceful terms, thanked the donors, and expressed the appreciation of the Toronto Branch at the attendance of so many visitors.

The theatre party was in every way a great success. It brought the members together, and provided an entertainment that was most heartily enjoyed.

THURSDAY, September 26th, 1907.

MORNING SESSION.

At 10 o'clock a.m. the President called the Convention to order, and said: Gentlemen, we will proceed with the business of the session. The first item on the programme is that of the report of the Committee on Technical Education, which will be presented by Dr. Wickett.

Dr. S. Morley Wickett.—You will find the printed report of the Technical Education Committee on page 83 of the Reports of Standing Committees. It reads as follows:

TECHNICAL EDUCATION COMMITTEE.

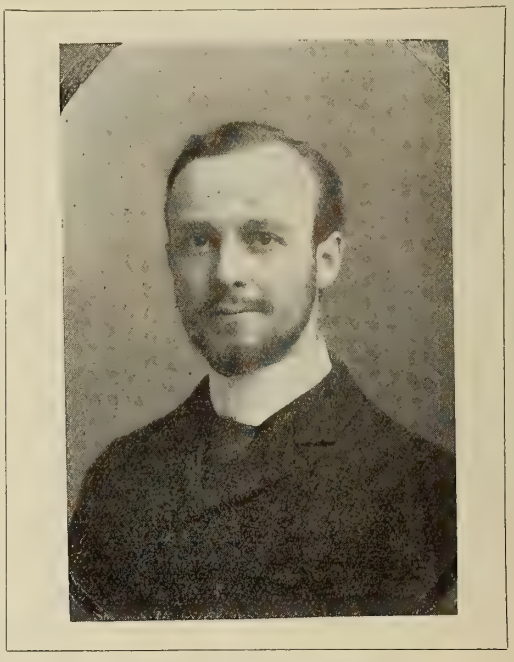
The report which follows is the first made by your Technical Education Committee as a standing committee of the Association. The resolution adopted at the Montreal Convention in 1904 provided only for the appointment of a special committee, whose duty it was to be "to investigate the subject of technical education, as dealt with in other countries, with a view to recommending early action on the part of the Dominion Government in inaugurating a national movement for a standard system of technical education in Canada."

The programme here outlined was in due course carried out, and reported at the annual meetings in Quebec and Winnipeg. Realizing, however, that there was still much to be done, both in co-operating with the anticipated commission of enquiry and in permanently caring for the needs of industrial efficiency, your Committee recommended that it be constituted on a permanent basis, which recommendation the Association saw fit to approve of.

Your Committee's efforts have been steadily directed towards the accomplishment of the object referred to in the Montreal resolution, viz., the inauguration by the Dominion Government of a movement to secure for Canada a comprehensive national system of industrial training. The more the subject is studied the more apparent does it become that such a movement must be inaugurated, and inaugurated promptly, if Canadian industry is to hold its own in competition with the highly skilled and highly specialized industries of other countries, if important industrial positions are not to be filled by foreigners, and if Canadian workingmen are to be given an opportunity to progress. Germany, France, England and the United States have long since recognized the important bearing of industrial efficiency on national trade and commerce, by affording their artisans every opportunity to attain the highest degree of skill in their respective trades. The great progress these countries have made as a direct outcome of such a policy is one of the most interesting chapters in the history of modern industrialism. There seems no reason why Canada, with the abundance and variety of her natural wealth, and the resourcefulnes of her people, should not be able to do equally as well if her workmen were but given the same opportunities to acquire proficiency. But the question cannot be approached in any haphazard manner, by the establishment of a school here and a school there, to give a course of general instruction in technical subjects. It must be made a national question ; it must be worked out on a broad and systematic basis, so that the needs of all localities, of all industries, and of all classes will be adequately provided for. This can only be done by securing the co-operation of private and municipal, with provincial and federal interests, and the Dominion Government, as the one central authority, seems best fitted to take the initiative in the interest of trade and commerce.

In bringing the matter to the attention of the Government your Committee has only asked for the appointment of a small expert commission to enquire carefully into the needs of the country in the way of technical education, and to suggest the means whereby these needs could best be taken care of. Such a commission would, it is believed, clear the air, and prepare the way for intelligent action by all interested parties. To the appointment of a Dominion Commission there seems to be no reasonable objection on constitutional grounds ; on the contrary it would plainly seem to be the duty of the Federal Government, in reserving to itself the regulation of affairs pertaining to trade and commerce, to take prompt action in a matter of such vital importance to our industrial welfare. Technical education is assuredly but the domestic side of the tariff.

Just what part the Dominion might eventually play in a national system of technical education would depend largely upon the recommendations of the Commission to be appointed, for in arriving at their conclusions they would, no doubt, go thoroughly into the constitutional aspect of the problem. It is not and never has been the desire of the Association that the Dominion should itself take part in the work of instruction. Tuition as heretofore must remain a matter of local administration, subject to provincial supervision and aided by provincial contributions. It is to be noted that in other federal countries—Germany, Switzerland and the United States—the



MR. S. M. WICKETT
(Wickett & Craig, Ltd.)
Chairman Technical Education Committee, 1906-07-08

central government extends important aid to industrial education as part of its industrial policy. Possibly the Government might find it advantageous to maintain a Department of Research, and to establish and thoroughly equip a Bureau of Standards in connection with the Department of Inland Revenue for aiding and encouraging the production of goods of the first quality. It might also find it advantageous to improve the work of our art and industrial museums, and to bring the federal and provincial museums into closer relation with one another. The Government might conceivably find it in the interests of trade and commerce to arrange with the provinces to provide facilities for certain kinds of technical training, and themselves pay for the expenses incurred, as has been done in the States. These, however, are but suggestions indicating the existence of a useful field wherein the federal authority might operate. For the present the main thing is to have the whole question thoroughly investigated by a competent Commission in the interests of the country at large.

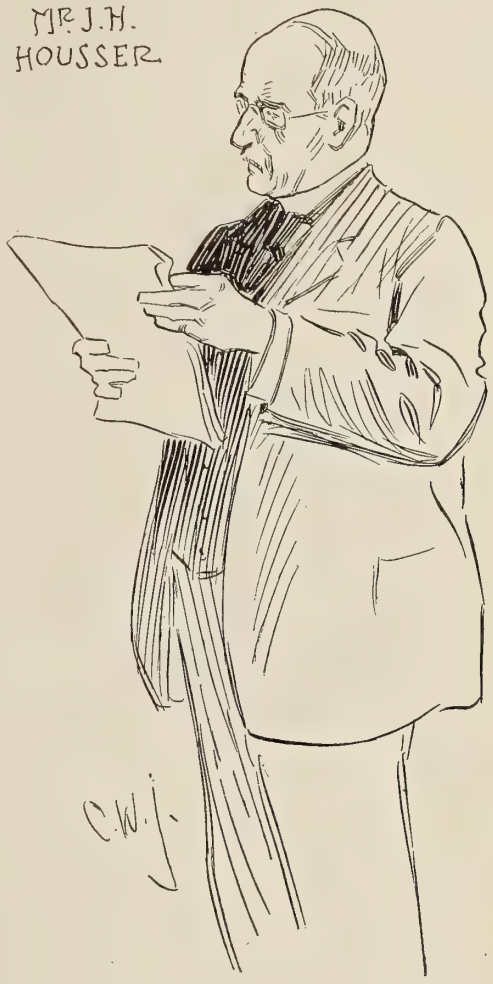
That it is a national question no one will dispute. Manu-

facturers and employers of labor proclaim it such when they find it impossible to procure the higher grades of skilled help from among Canadian workmen. Workingmen, too, proclaim it such when they find themselves shut out from factory positions of higher responsibility by reason of their lack of technical training. Our Alien Labor Laws are framed to protect the Canadian workingman, yet little or no provision is made to qualify the man so protected for the work that may be offered him. Our tariff is framed to protect the Canadian manufacturer, yet little or no provision is made to supply the trained men to carry on the industry.

From whatever standpoint it may be looked at, technical education is inseparably a part of our national industrial policy. As already observed it is the domestic side of the tariff. The tariff, by regulating the amount of our imports, encourages native industry and secures a market for its products. Technical education by improving the efficiency of our artisans makes for economy of production, and enables industry eventually to do with less protection. Again, technical education brings with it a careful study of our national resources. It devises means whereby our raw materials can best be utilized in the process of manufacture, and thus stimulates the growth of our industrial establishments.

Throughout the year your Committee has conducted an active campaign to bring about the appointment of the desired commission of enquiry. To this end a letter was first sent to the leading Boards of Trade in Canada, together with a copy of the Association's memorial, asking for their co-operation. Twenty-eight Boards at once took favorable action ; these include Halifax, St. John, Quebec, Montreal, Ottawa, Smith's Falls, Kingston, Peterboro', Lindsay, Toronto, Orillia, Hamilton, Brantford, Paris, London, Port Arthur, Winnipeg, Brandon, Regina, Moose Jaw, Prince Albert, Medicine Hat, Calgary, Edmonton, Nelson, Rossland, Vancouver and Victoria. Many of them had already been at work in the advancement of technical educational, and all united to call on the Government to accede to our request. It is highly significant and important that organized labor presented a similar resolution, and came a second time to Ottawa to join our deputation. A new edition of the memorial, with a supplement containing the full text of the resolutions adopted by these various boards was then printed, and a copy placed in the hands of every member of the Senate and House of Commons, accompanied by a personal letter calling attention to the principal points involved. In addition to the above circulation, the booklet was sent to prominent and influential men in every part of Canada, where it was thought it would do good. An effort was next made to have the subject introduced for discussion at the conference of Provincial Premiers, in hopes that some united action might be taken, but without success, though the majority of the Premiers expressed strong personal sympathy with the movement. Interviews were subsequently had with the Minister of Trade and Commerce and other Cabinet Ministers, and on February 22nd a strong deputation, consisting of members of Parliament and representatives from the Canadian Manufacturers' Association and the Trades and Labor Congress waited on the Premier and a number of his colleagues to urge the importance of immediate action. The deputation met with a favorable reception, and your Committee feel that the Cabinet were duly impressed by the arguments set forth. Had it not been for the multitude of other business and the general desire to procure an early adjournment of the House to enable the Premier to attend the Colonial Conference, it is more than likely that the matter would have been dealt with last session. There is now every reason to believe that the Government are preparing to take action, and another year your Committee expects to be in a position to report substantial progress.

Meanwhile, it is a pleasure to state that public opinion is year by year growing more favorable to the adoption of a vigorous industrial policy that will keep Canadian workmen at home, and open to them the highest positions in the gift of our manufacturing establishments. Men of every class and of every creed, whether rich or poor, whether Liberal or Conservative, can here meet on neutral ground and join hands in support of a movement that cannot but redound to their mutual benefit. And, as a prominent member of the Trades and Labor Congress recently remarked, when organized labor and the Senate chant the same tune, it is time for the Government to act. When presenting our memorial to the Cabinet at Ottawa one of the trades and labor delegates remarked significantly that labor is as radical and aggressive as it is, simply because it is not making the progress it should, and that it it but had better and more frequent opportunities for advancement, Parliament would be saved a great deal of time and worry, and labor would be much more content.



Characteristic Poses

With a view to further educating public opinion, and as it were to make assurance doubly sure, your Committee is preparing to have a series of illustrated lectures on the "Benefits of Industrial Training" delivered at various points throughout Canada during the coming winter.

In conclusion, your Committee wishes to submit for your approval the following resolution, which, it is hoped, will now realize all that is anticipated:

Whereas, adequate provision for technical education is one of the pressing industrial needs of the country, and

Whereas, the Dominion Government now has before it the memorial of this Association for the early appointment, in the interest of all localities and classes and of our great natural resources, of an expert commission of enquiry,

Be it resolved, that this Association in Convention assembled place itself on record as being solicitous for speedy,

favorable action by the Government, and that a copy of this resolution be forwarded to Sir Wilfrid Laurier.

Respectfully submitted.

S. Morley Wickett, *Chairman.* G. M. Murray, *Secretary.*

Dr. Wickett moved, seconded by Mr. Birge, that the report as read, together with the above resolution, be adopted.

The President put the motion, which was carried.

The President.—The next item on the programme is an address by Mr. Emery, of New York, but as the attendance is small at the present time, with your consent we shall place it further down on the programme. We shall take up the next item, which is amendments to the by-laws.

Mr. Thorn.—The Constitution and by-laws are exceedingly important. I would suggest that you wait until there is a much larger attendance before you take up the amendments. Some are of slight importance, but others are of exceeding importance.

The President.—The amendments have all been considered by the Resolution Committee, and they will be able to say what has been done about them.

Mr. Thorn.—Could we not have the address on "The Cost of Power as a Fixed Charge"?

Hon. Mr. Rolland.—I believe we might commence the discussion of the amendments to the by-laws at the present time, and I move, seconded by Mr. Finlay, that we proceed with that item.

The President put the motion, which, on a vote having been taken, was declared carried.

The President.—I will call on the Secretary to read the amendments.

AMENDMENTS TO CONSTITUTION AND BY-LAWS.

The Secretary.—In accordance with notifications which were sent out on September 10th, notices of amendments to the by-laws have been received as follows: The first is a by-law to amend the duties of the Treasurer, as outlined on page 9 of the by-laws, copies of which are available here for those who wish them. At present one of the clauses in the by-laws reads: "He shall, in conjunction with the Secretary, sign all cheques and have them countersigned by the President or one of the Vice-Presidents, or such other person as may be designated by the Executive Council." The proposed amendment is to strike out all words after the word "cheques." The object in striking out these additional words is that the present by-law requiring three signatures to every cheque sometimes delays the transaction of the Association's business. It is felt that two signatures on the cheque accomplishes all that was intended to be accomplished by the insertion of these precautions. This amendment meets with the approval of the Finance Committee and of the Treasurer himself.

Mr. Thorn.—I suppose it is not the intention really to strike out also the following: "He shall cause to be kept the accounts of the Association," etc. That is not made clear in this, and it should be.

The Secretary.—It was just the remainder of that single sentence that it was proposed to strike out.

Mr. Firstbrook.—The words to be struck out are in the proposed amendment.

On motion, duly seconded, the amendment was adopted.

The Secretary.—The second amendment is one to provide for a British Office Committee as one of the standing committees of the Association. It was practically decided that this should be done at the annual meeting a year ago, but through an oversight the necessary words were not added to the clause in the by-laws where that would most naturally come up. The clause referred to appears on page 11, clause 2. The amendment is to insert after the words "Technical Education Committee" the words "and the British Office Committee."

On motion of Mr. Birge, seconded by Mr. Sheridan, the amendment was adopted.

The Secretary.—The third amendment is one which has been introduced by the Commercial Intelligence Committee of the Association, in whose report, read yesterday afternoon, a recommendation was made that a Committee should be appointed for the purpose of collecting and disseminating information regarding international exhibitions in all parts of the world. The Commercial Intelligence Committee have given notice of the two amendments, both of which you will find on this sheet. The first is to insert between clause 4 and clause 5 on page 11 a new clause, and to change 4 and 5 to 5 and 6, respectively.

It was moved and seconded that the amendment be adopted.

Mr. Thorn.—I move, in amendment to the motion, that the consideration of clause 3 be left over until we come to clause 5, which also relates to the Exhibition Committee, so that everything pertaining to the Exhibition Committee may be discussed and considered at the same time.

Mr. J. P. Murray.—I second the amendment.

This was carried.

The Secretary.—The next amendment of which notice has been given is in connection with clause 5, on page 11, which is to deal with the Committee on Nominations and Resolutions. It was felt that it was necessary to empower this Committee to look over the by-laws each year and to suggest such changes as might be necessary, but which were not provided for in the notices of amendment sent in by private individuals. Their suggestion is to amend the by-law so as to make it read as follows: "The Chairmen of the various standing committees shall be constituted each year, for the special work of the Annual Meeting, a Committee on Resolutions, Nominations and Amendments."

I may say that since this amendment was drafted by the Committee on Resolutions and Nominations, a request was made to them that the Chairmen of the Branches should also be constituted members of this Special Committee, and the Committee on Nominations and Resolutions has the pleasure of recommending the acceptance of this suggestion to the meeting.

On motion of Mr. George, seconded by Dr. Wickett, the amendment as read was adopted.

The Secretary.—The next amendment in connection with which, I presume, amendment No. 3 will also be considered, is the words defining the duties of the two new Standing Committees of the Association: "British Office Committee.—This Committee shall deal with all matters relating to the management of the Association's office in Great Britain."

On motion of Mr. Murray, seconded by Mr. Harris, the amendment as read was adopted.

The Secretary.—The next is "Exhibition Committee.—It shall be the duty of the Exhibition Committee to collect and disseminate information regarding international exhibitions in all parts of the world, and to assist members with the transportation and arrangement of exhibits. It shall also be their duty to act as the Association's representatives to the Canadian National Exhibition Association."

Mr. Rogers moved, seconded by Mr. Fortier, that the amendment as read be adopted.

Mr. Murray.—I wish to move an amendment to that motion, and I do so because I think there is a misconception as regards the term, "Exhibition Committee." The representatives of this Association to the Canadian National Exhibition are really not a Committee of this Association. I think that in the preparation of the amendment this may have been overlooked, and to have this matter thoroughly well understood, and to have the best results in connection with exhibitions, I

have pleasure in proposing, seconded by Mr. Thorn, this resolution:

Whereas, at present the acquisition and distribution of information *re* transportation, placing and caring for exhibits of our members in any Canadian or other exhibition, is divided between different Committees and Branches,

Be it Resolved, that the Executive Council be hereby requested by the members in Convention to devise a method, which shall become operative when accepted by Council, by which greater facilities and better results may be obtained for Canadian manufacturers at exhibitions.

Mr. Thorn.—In rising to second Mr. Murray's amendment, I might explain, for the information of the Convention, that the Executive of the Toronto Branch did not approve of the proposal that is on the blue paper containing amendments to the By-laws; therefore, Mr. Freysing, Chairman of the Branch, Mr. J. P. Murray and myself were appointed a sub-committee for the purpose of bringing in something that was thought would meet with the approval of the Branch and of the Convention, and you will notice in the proposed amendment we suggest that the Executive Council take the matter into consideration, devise a plan that will be suitable, and then put it into operation.

Mr. Russell.—There is not any great difference between the amendment to the by-law as proposed here and the amendment to the amendment proposed by Mr. Murray and Mr. Thorn, except this: the amendment here (on blue paper) provides the specific way in which the interests of the Association on exhibition matters shall be looked after. We consider that it is best now, owing to the importance of these exhibitions, to have a Special Committee to deal with them; and as we have one Committee already representing the Association in the great Canadian National Exhibition, the idea is to constitute these twelve representatives into a General Committee. They are men who are selected because of some experience in exhibition matters. They represent the Association. Practically, the difference between the suggested amendment to the amendment, and this proposal is that instead of dealing with it to-day, you turn it back for the Executive Council to work out later. I think this proposed amendment is clear, and provides a proper way of handling the matter. The Annual Meeting is competent to pass on it, and adopt the proposed clause 3, that the Exhibition Committee be composed of twelve members, and in addition to being the representatives on the Canadian National Exhibition, they look after our interests at international exhibitions. I, therefore, support the amendment on this blue sheet.

The President.—At the meeting of the Resolution Committee yesterday the question was presented by Mr. Thorn and several other gentlemen, and after the Resolution Committee had considered it they came to the conclusion that the amendment as originally drawn up would be in the best interests of the Association, and that was what the Committee adopted.

Mr. J. P. Murray.—The reason that this amendment to the amendment is placed before you is because the original amendment is unconstitional. We have no Exhibition Committee. It is not that we have any objection to the amendment as it is printed, except that it is not sufficiently clearly defined. The intent of the two amendments is the same. The amendment to the amendment was so prepared that it would not conflict with the amendment. We merely want to get it before the Association in a constitutional way.

Mr. Birge.—It would seem to me, in reply to Mr. Murray's objection that we have no Exhibition Committee, that we have simply got the cart before the horse. We are considering now clause 5, instead of clause 3. If we pass clause 3, we must appoint an Exhibition Committee. I would move, seconded by Mr. Russell, that clause 3 be adopted.

Mr. Thorn.—I wish to point out the effect that the adoption of that will have. You will be taking away the right that the Local Branches now have under the by-laws, page 15, to nominate representatives to whom they are entitled, on any of the various Exhibition Boards. The Association will be forming those representatives into a Committee. It is to that that the Toronto Branch Executive has objected.

The President.—I might say, in reference to this matter, that this amendment No. 3, at Mr. Thorn's suggestion, was allowed to stand over until we discussed this other clause. According to the motion of Mr. Birge and Mr. Russell, that matter is now before you.

The President put the motion to adopt clause 3, which, on a vote having been taken, was declared carried.

The President.—Now, the other question is before you—that is, the Exhibition Committee. If you are ready for that, we will take the amendment first.

The Secretary having read Mr. Murrays' amendment, said: This apparently is not an amendment to the by-laws, but is simply a resolution to pave the way for an amendment at some future meeting. The original amendment as proposed reads as follows, defining the duties of the proposed Exhibition Committee: "It shall be the duty of the Exhibition Committee to collect and disseminate information regarding international exhibitions in all parts of the world, and to assist members with the transportation and arrangement of exhibits. It shall also be their duty to act as the Association's representative to the Canadian National Exhibition Association."



MR. P. W. ELLIS
(P. W. Ellis & Co., Ltd.)
Chairman Tariff Committee, 1907-08

The President put the amendment to the amendment. It was declared lost.

The President stated the motion to adopt the amendment.

Mr. McNaught.—It seems to me it would be a mistake to appoint that Committee as the Association's representatives to the Canadian National Exhibition. I think if that were left off it would be a great deal better. I think it is all right to appoint an Exhibition Committee, which will be a General Committee selected from the whole Association; but the last sentence appears to make that Committee representatives to the Canadian National Exhibition. In my opinion, the representatives to that should be appointed by the Toronto Branch. It would not be advisable to have members from

all over Canada on that Committee, because they would not come to the meetings. I think if it were amended by leaving the last sentence off, you would have a much better arrangement for your Association, and better for the Exhibition. If necessary, I will move in amendment that that last sentence be dropped.

Mr. Birge.—I will second that amendment. It seems to me that there is a very great deal of force in what Mr. McNaught says. I know from some years of observation, something of the work of the members of the Committee in Toronto in connection with the Exhibition, and if they have members on the Committee, they want them to work. If they are appointed from all over the Dominion, from outside of the City of Toronto, it would be almost impracticable to get them there; and as Mr. McNaught has remarked, the expense is borne by the citizens of Toronto, and not by this Association. Therefore, I have great pleasure in seconding the amendment to eliminate the last sentence.

Mr. Firstbrook.—Where shall we stand? It appears to me the wiser course would be to refer the matter to the Executive Council for them to thresh out. We cannot at this time go into details.

The President.—You have an Exhibition Committee. It is provided for in clause 3.

Mr. Firstbrook.—We shall want two Exhibition Committees, certainly. It appears to me the Executive Council can thresh this matter out and put it in proper shape.

Mr. Russell.—I agree with what Mr. McNaught says, that it is necessary to have the representatives to the Exhibition from Toronto or near Toronto, or at least most of them, any way; but I think you can trust the Canadian Manufacturers' Association to take that into consideration. You have the same thing in our Standing Committees. Our Standing Committees have to meet in Toronto, and they necessarily have to be composed of more Toronto men than outside men, and in some cases almost entirely so. The Exhibition is now a Canadian National Exhibition, and our Association is a Canadian National Association. Instead of confining its work to Toronto, we want all our manufacturers to take an interest in the Canadian National Exhibition. I favor the retention of the amendment—that is, on the blue sheet—because I believe it will help to widen the interests of the members, and I know you can trust this Association to elect the majority of the men from near Toronto, or men who can attend and help. I think the Association will profit. I support it as it stands.

Mr. George.—Before the members vote, I think we had better clearly understand just what position we are in. I must confess that at the moment, without going carefully into the by-laws, I dont. We are dealing with two separate propositions. The representation on the Canadian National Exhibition or the Toronto Industrial Exhibition is a separate matter from the work of keeping track of international exhibitions. The representation on the Toronto Industrial Exhibition is guarded by the charter of the Toronto Industrial Exhibition Association. We must provide for representation on that, irrespective of what we do in any other way. That representation, I think, should be practically from the City of Toronto, or from its very immediate neighborhood. This is advisable for many reasons, but chiefly in order that the Committee can work together for the special object for which it is appointed; and it is particularly necessary that that Committee should be convenient, so that the members can give support at times when such support is necessary. I refer particularly to election time in the spring.

The other question is to provide a Committee to handle the work that is detailed. You are trying to provide means for all members to exhibit at the National and other Exhibitions. I would like this meeting to consider well what position we are going to be in if we try to make the one Committee do all the work. I think possibly that Committee will be well able to do it, but are we going to have the representation that we want from outside in dealing with outside exhibitions?

Mr. Fraser.—Might I suggest the following: "It shall be also their duty to elect representatives to the Canadian National Exhibition Association"; that would leave the whole matter in the hands of the Exhibition Committee, and I think, taking the interests of the Exhibition into consideration, they would probably elect all Toronto men.

The President.—Did I understand you to say, Mr. George, that it was in the charter of the Industrial Exhibition that the Canadian Manufacturers' Association should elect members to the Exhibition Committee?

Mr. George.—Yes.

Mr. McNaught.—No; it does not say that. It says we shall send twelve representatives.

The President.—If that is the case, I think the Canadian Manufacturers' Association can be safely trusted to send members to the Exhibition that will be convenient and do their duty; and while I do not wish to oppose anything that is for the best interests of the Exhibition, I think the Canadian Manufacturers' Association should have the privilege of choosing those men. I think the amendment that is here on the sheet, which has been carefully considered two or three times, is quite safe, and I don't think there would be any harm done to the National Exhibition by such an amendment.

Mr. McNaught.—At the risk of differing from you, I must take exception to what you have just said, for this reason: Mr. George pointed out that there are two Committees, and they should be different because their duties are different. As the resolution says, their work will have to do with disseminating information, arranging transportation, etc. That is a matter entirely distinct from anything we have in hand. But when you come down to our Canadian exhibitions you are singling out the Toronto Exhibition for different treatment from the others, according to our understanding to-day. For the Exhibitions at London, Halifax, Winnipeg and Ottawa we elect delegates from these cities. You propose to treat Toronto entirely different; you propose to elect a different Committee from all over the Province. In my opinion, it would be a very detrimental step, and, I think, very much against the interests of the Exhibition itself, and against the interests of the Association. I am satisfied you could not get twelve men selected from the Association at large who would do the work that the men selected in the City of Toronto are doing. I don't see why the Toronto Exhibition should be singled out for different treatment from the others. I think you are doing something which will injure the Exhibition, without advancing the interests of the Association in any way.

Mr. Henderson.—There is some force in what Mr. McNaught says, but will he kindly tell us how we are going to have these men appointed?

Mr. McNaught.—At the present time they are nominated by the Local Branch and elected here.

Mr. Thorn.—That is exactly the position. The Toronto Branch nominates. In accordance with the by-law on page 15, it nominates twelve representatives to the Toronto Industrial Exhibition. The names of those representatives will come before this Convention to-day for approval or otherwise. That is the procedure, and it is one that has worked out very satisfactorily in the past. It has been proposed to change that and to form those representatives into a Committee—in fact, to take away from the Toronto Branch the right it now has to nominate those gentlemen. That has not had the consideration of the Toronto Branch; they have had no opportunity of considering it; it has not had the consideration of the representatives to the Exhibition, because they have had no opportunity of considering it. As soon as it came before

the Executive of the Toronto Branch they wished us to suggest to this meeting that the Executive Council should have an opportunity of considering it and devising a plan that would work, and then putting it into operation. That was the proposition made by Mr. Murray, and seconded by myself. I think if you would allow that to be done you would find it would work out much more satisfactorily than the proposed amendment.

The President.—Strictly speaking, the amendment Mr. McNaught has made should have come before this. This has been put to the meeting. I thought you were all ready for the question when I put it. I was going to put the original motion when Mr. McNaught came forward with his amendment.

Mr. Murray.—On page 15 of our by-laws it reads, in the second clause from the top, "Local Branches will be asked to officially nominate the representatives to which they may be entitled on any of the various Exhibition Associations within the locality in which the Branch is organized." Is it the understanding of this Convention that that is going to be rescinded and no longer allowed?

Mr. Henderson.—No notice has been given, so it cannot come before the Annual Meeting.

Mr. Murray.—You are getting things very much mixed up. I contend my motion is one that will redound to the best interests of the Association. Turn this back to the Executive Council; let the thing be carefully studied out from all points; let the Executive Council recommend something, and on their recommendation let it become operative.

The President.—This has been defeated, as I said before; but if Mr. McNaught's amendment is now put it will be an amendment to the amendment, and Mr. Murray's amendment will be voted on again.

Mr. McNaught.—If I had understood the amendment could not have been amended and spoken on, I would have spoken to Mr. Murray's motion.

The Secretary.—Mr. McNaught's motion, I believe, would be an amendment to the amendment to the amendment. Strictly speaking, that proposal is to strike out from the amendment as originally proposed the following words: "It shall also be their duty to act as Association representatives," leaving the clause in the by-law standing as follows: "Exhibition Committee.—It shall be the duty of the Exhibition Committee to collect and disseminate information regarding international exhibitions in all parts of the world, and to assist members with the transportation and arrangement of exhibits."

The amendment to the amendment as moved by Mr. Murray and seconded by Mr. Thorn, is as follows:

"Whereas, the present system in the Association for acquiring and distributing information *re* transportation, placing and caring for exhibits of our members in any Canadian or other exhibition, is divided between different Committees and Branches,

"*Be it Resolved*, that the Executive Council be hereby requested by the members in Convention to devise a method, which shall become operative when accepted by Council, by which greater facilities and better results may be obtained for Canadian manufacturers at exhibitions."

Mr. Henderson.—Before that is put, would Mr. Murray withdraw the whole of that and move that the whole clause be referred back to the Executive Council for further consideration?

Mr. McNaught.—I will withdraw my amendment, and vote in favor of Mr. Murray's motion.

Mr. Rogers.—We have passed a clause to organize an Exhibition Committee. Can we not define what their duties will be?

The President.—I think that can be done easily enough. I want it to be distinctly understood that this motion of Mr. Murray's, seconded by Mr. Thorn, has been put to the meeting and has been declared lost, but on account of the circumstances arising out of the case it is reopened, and with your permission I will put this again to the meeting. Those in favor of sending the resolution back to be voted on, please stand.

Those in favor stood, and it was declared carried.

The President then stated the amendment to the amendment proposed by Mr. Murray and seconded by Mr. Thorn.

Mr. George.—Might I point out that clause 3 will have to be considered in conjunction with that?

The President.—Clause 3 has already been adopted.

Mr. George.—Then you tie the hands of the Executive



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Council. They have to have practically two Committees.

Mr. Thorn.—Just to make the matter clear, because I think after all it is only a matter of having the meeting clearly understand, if the resolution moved by Mr. Murray and seconded by myself, is now carried, then you can bring up the point that Mr. George has referred to and deal with it as a separate item.

The President put the amendment to the amendment, proposed by Mr. Murray and seconded by Mr. Thorn, which, on a vote having been taken, was declared carried.

Mr. Thorn.—I would suggest that the meeting be asked if they are willing to reconsider clause 3, which was also carried, providing that the Exhibition Committee consist of twelve members? As you haven't any Committee, I think that ought to be repealed. That will cover the point mentioned by Mr. George.

Mr. McNaught.—I think that should be allowed to stand,

for this reason; if our Executive Committee reconsider this matter and they decide to have an Exhibition Committee, then you have got the machinery to put it in motion.

The President.—I think it is perfectly in order. Mr. Birge moved that some time ago, it was put to the meeting, and it was approved of. Do you wish to go back to it again?

Voices.—No, no.

The Secretary.—The next amendment of which notice has been received is that dealing with nominations from the various branches to the Executive Council. The clause in the by-law reads: "Wherever Local Branches are formed these shall have the privilege of officially nominating representatives to the Executive Council, the number of such nominations being one for each fifteen members of the Branch."

It was moved by the Toronto Branch that this clause be amended by inserting in place of the words "officially nominating" the words "electing their," and the Committee on Nominations and Resolutions to make the by-laws in the different parts consistent, substituted the word "twenty" for the word "fifteen," because it is stated under the head of meetings in other parts of the by-laws that representatives to the Executive Council shall be in the proportion of one to every twenty of the membership, as determined on the 31st August.

Mr. Thorn moved, seconded by Mr. Ewing, that the clause be adopted.

The President.—Before the question is put I wish to say something myself on this subject. I am one of those who are very much opposed to the Branches electing their representatives. I believe that since this Association is national, we who are on the outside have as much right to vote for any man as members of Branches have a right to vote for us; but if we put it in the hands of the Branches of the Association, we who belong to no Branch have no vote, and the Association becomes a clique. I don't believe in it. I think our aims are national, and I think we can be trusted to elect our own members,

Mr. Tindall.—I would like also to point out to the Convention that you cannot change this amendment in the way it is stated here, to "elect their," unless you change your whole by-laws. It will make your by-laws entirely inconsistent. The whole idea of the Executive Council most undoubtedly was that every one of the two thousand members of this Association should have the right to vote for who are to be on that Executive Council. If you put this in, as the President says, you change the whole constitution. It is all right if it is thought that the whole assembly are in accord with that and you change your method of election; but you cannot pass this unless you change your Constitution and change your by-laws.

Mr. Ewing.—This proposed amendment is very much favored by the Local Branches. Montreal is practically the big end of the Province of Quebec. We try to elect men to the Executive Council who will attend the monthly meetings. We send up those names, and it is quite possible, and I believe it has occurred, that these names may be added to by the Nominating Committee; and possibly because the new names are well known here they may carry in preference to the names nominated by the Branch in Montreal, men who we know are going to attend these meetings. It certainly does not seem altogether fair that our nominations can be turned down by the Nominating Committee here and men substituted who may not be as good as the men we sent up. It is quite true it will more or less localize the representation, but an important Branch like Montreal surely should be allowed to say who it is going to have represent it in the Executive Committee.

Mr. George.—The nominations of any branch are not turned down by having other names added to the ballot paper. Whether that is quite proper or not is a matter for the meeting to decide, but it is the general electorate of this Association who have to be pleased and satisfied, and have the right to say who shall represent them on the Executive Council of the Association; and I think it rests with them to say whether or not they shall vote on all who are to control the destinies of this organization. I don't think it is wise to introduce any more localism into the Association than we can possibly help. Our aim has been to make it a national organization from start to finish. One of the difficulties we have had to encounter is to make the men on the outside feel they have an interest in the work of the Association. With many of them the only time they can get in close touch with the Association is at an Annual Meeting. If they come here and find everything is practically cut and dried, it takes away from them a very large portion of the interest they may have in the work of the Association. We have got along well in the past, and I think we had better stick to our previous policy instead of making any radical change that I believe would be absolutely antagonistic to the best interests and to the national spirit of this organization.

Hon. Mr. Rolland.—As has been said, if this amendment were adopted, it would change completely our by-laws. I believe in each Branch making suggestions, but if the Executive Council is elected by the Local Branch it makes this Association a Local Association. I would not favor the change that is proposed.

Mr. Henderson.—It seems to me, as an outside member, that it would be a great mistake to divide up the whole Association into cliques. The members elected would not be members of the Association, but perhaps of the different Branches to which they belong. As it is now, some men say this has all been cut and dried; but if this plan were carried out as proposed there would be good grounds for saying it. I would strongly support the amendment to the clause.

Mr. Murray.—We could get over the difficulty by having it made an order that nominations of the Branches, when they are on the ballot paper, should be so designated.

The President.—They are so now.

Mr. Murray.—This is the point. The Montreal Branch nominates a certain number of men, or the Toronto Branch, or any other Branch, to the Executive Council. Let these be specified as nominations of that Branch. Other names can be added to it by members of the Association, but the members will know those names that are designated as nominations by the different Branches.

The President.—There are no names on the Branch Association ballots that were not proposed by the Branches themselves.

Mr. Burland.—What is the constitution of this Nominating Committee? If this Committee consists largely of men representing the Toronto Branch, from Toronto and the country about there, it practically leaves in their hands the correction or addition of names which have not been received by the Local Branches. On the other hand, if this Committee is representative of the Local Branches, then—

The President.—We amended clause 5 before you came in. The Chairmen of the different Branches are now on the Nominating Committee. That Committee meets after nominations are in, and if there have not been sufficient nominations it puts more in nomination.

Mr. Booth.—It seems to me it is very fair the way it stands at present. It is left for the branches to officially nominate. They nominate twenty and we elect fifteen out of the twenty they have nominated.

Mr. Harris.—Yesterday, when I was marking my ballot, I had to go to a gentleman that I believe came from Montreal and ask him who were the men to represent the Montreal Branch. I probably missed some good men and voted for some inferior ones; and I know men from Montreal, in voting on the members for Toronto, do the same thing. They might miss the good ones and get bad ones. I don't know the people

from Montreal or Nova Scotia. I was simply taking the advice of somebody. I certainly am in favor of Mr. Ewing's suggestion. I think the members from the various sections are the best able to judge who should be their representatives on the Council.

Mr. Thorn.—The matter would be thoroughly satisfactory even now if it were only carried out in the way the by-laws provide, and the way it has been carried out, with the exception of the last two years. The Annual Meetings of the Branches are held, and every member is invited to attend and to nominate anyone he may choose. The Branches then in some cases have an election, and send forward the names of those they wish to represent them. What happens is this: After those names have been sent forward, the Nominating Committee, consisting of a few Toronto gentlemen, meet and undertake to add names to those that have been sent forward from the Branch. That is where the objection comes in, and that is, I understand, why it has been proposed to change the by-law.

The President.—It has not been done this year.

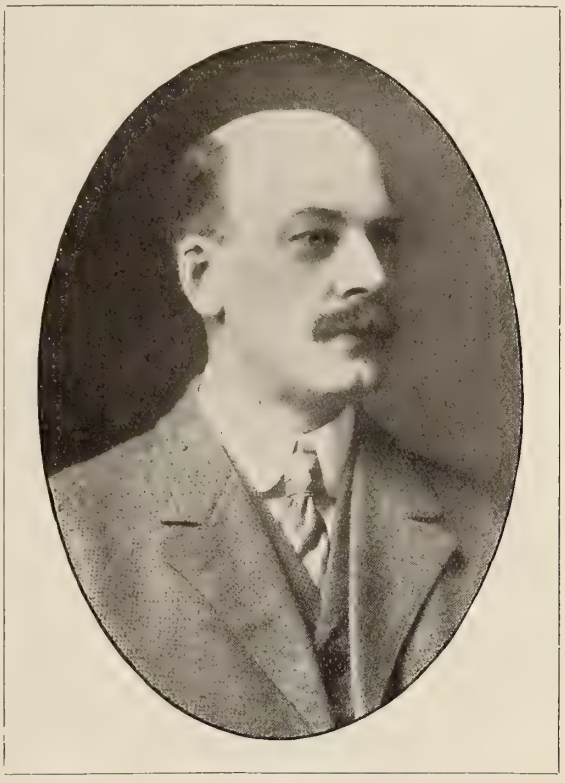
Mr. Thorn.—The intention was to do it until myself and two or three others objected to it. You spoke of a clique. I would be very sorry to accuse the Nominating Committee of being a clique. I was a member of that Committee, and I know exactly how it is done, and it is done in the same way to-day. I am not objecting to the names they send forward, but what the Branches maintain is that after they have officially nominated their representatives, no Committee should undertake to change what they have done.

Mr. Findley.—This probably has been a live question, and one well considered by the Executive of the Branches and some few who are particularly active in Branch work, but to me the question is largely new, and I am sure it must be to a large number here. Of course, it is on this paper sent out in reference to the amendments. Still, I propose to vote against the change on the ground that it has not received sufficient consideration. It seems to me that it is a very radical change, and one that should not be put through without consideration.

Mr. McNaught.—I think this matter has not been threshed out the way it ought to be. While I quite agree that the Branches should nominate their representatives to the Council, I think it very important, as the President has said, that the whole body of the Association should have the election of them. The difficulty heretofore has been that the election of representatives from the different Branches has been made by quite a very small proportion of the Branch. At the last Annual Meeting held in Toronto, I believe there were seventeen members there out of five hundred members. I don't think that is a representative gathering at all. My proposition was that if they were going to have that kind of election they should have it by ballot, so that every one of the five hundred should have an opportunity to say who was going to be his representative on the Council. I believe we ought to have an understanding now in regard to the duties of the Nominating Committee. I believe they should have the power to add names if they think the best men have not been put on. That, of course, has been objected to, but I think myself it is a good proviso. If the Branches do not nominate the men that are considered the best men for consideration, let this Committee have the right to add names, so that this Association as a whole will have the chance at the general election, in this way of saying who are the men they would have represent them.

Mr. McGill.—I have been getting a little information about this. I was always under the impression that the word "privilege," which was given to the Branches, of nominating their representatives to the Executive Council, conferred upon them the right solely of nominating those men. I can appreciate the fact that if the Branch only nominates the requisite number it has the appearance of a selection on which there could be no contest, and it might be well if the Executive Council considered an alteration of the wording of that clause whereby it shall be stated that the Branches shall nominate so many, of which eighty per cent. shall be elected. If that was imposed upon the Branch it would give the members of the Association that choice which they seem to desire.

Referring to Mr. McNaught's point, that a few members meet and nominate a certain number of men without the great majority having the opportunity to do so, that is the fault of the great majority. Each Branch holds its Annual Meeting, and the members have a month's notice of that. Why do those who do not attend a meeting complain of those who do attend trying to override the Branch?



MR. G. FRANK BEER
(Eclipse Whitewear Co., Ltd.)
Chairman Reception and Membership Committee, 1907-08

I quite agree with you, Mr. Chairman, that this body should have the free election of every member of the Executive, and should control its destinies. I think if a change were made as I have said, the members would have the opportunity of making their choice in the election, and the members of the Branches would have the opportunity of selecting men whom they know can give the time to the Executive work. For instance, take it in Montreal. There are many good men, men that would be a benefit to the Association, who are rarely in Toronto. We have approached them, and they say, "We rarely go to Toronto; we can't serve on that Executive." Then the Montreal Branch men strive to nominate men to the Council who from time to time will be in Toronto and have an opportunity to do their duty to the Association.

Mr. Firstbrook.—May I correct a misstatement with reference to the Toronto Branch? Every member of the Toronto Branch had an opportunity of nominating by mail. That is the way the nominations are taken in the Toronto Branch. That perhaps explains why there was not a larger attendance at the meeting.

The President.—You are perfectly clear on the matter now, but I will have the Secretary read it over so that there will not be any misunderstanding in the vote.

The Secretary again stated the amendment as proposed on the blue paper.

The President put the amendment, which, on a vote having been taken, was declared lost.

Mr. McGill.—Is it in order for me to move an amendment?

The President.—I have put the question.

The Secretary.—The next amendment is one to provide for a point that was raised in connection with the appointment of this Exhibition Committee, that is to say, "Local Branches will be asked to officially nominate the representatives to which they may be entitled on any of the various Exhibition Associations within the locality in which the Branch is organized, except where otherwise provided." The idea was to provide for the appointment of representatives to the Toronto Exhibition Association to serve also on the permanent Exhibition Committee of the Association. As that has been referred back to the Executive Council. I presume the Chairman of the Commercial Intelligence Committee will now be willing to withdraw that amendment.

The Chairman of the Commercial Intelligence Committee gave consent, and the amendment was withdrawn.

Mr. Emery Speaks on Technical Education.

The President.—We have with us to-day a gentleman well known to many of us already. Mr. James A. Emery, of New York, will now address us on "Technical Education." (Applause.)

The address will be found in another part of the present issue of INDUSTRIAL CANADA.

Mr. Birge.—Mr. President, we have been listening to wise words, the statement of incontrovertable facts dressed in a pleasant garb, but of very deep interest to us as manufacturers, and I could wish that every member of the Association from Halifax to Vancouver had heard them. I could wish that every employer of labor in Canada could have heard them; and I could wish further that every industrial employee in our factories could have heard these words that have come to us from Mr. Emery to-day on Industrial Education. I wish to move a resolution that I think will meet with the approval of every member of this Association: That whereas, we have listened with a great deal of pleasure to the eloquent and practical address on the subject of Industrial Education, we do hereby express our sincere and heartfelt thanks to Mr. Emery. I move further that his address be printed and incorporated in the proceedings of this Convention. (Applause.)

Mr. P. W. Ellis.—I take great pleasure in seconding the resolution.

The motion was carried with applause, and three cheers were given for Mr. Emery.

The President.—I have much pleasure, Mr. Emery, in tendering to you a hearty vote of thanks.

Mr. L. G. Read's Address on Power.

The President.—Gentlemen, I would like to have you remain on to the end. Our meeting will not be very much longer now. We have with us a gentleman who has kindly consented to talk to us on the "Cost of Power as a Fixed Charge," Mr. Read.

Mr. L. G. Read then addressed the Convention. The address will be found elsewhere in the present issue of INDUSTRIAL CANADA.

Mr. Robins.—I think if the Canadian Manufacturers' Association gave us nothing at our Annual Convention but two such addresses as either of the two last to which we have had the pleasure of listening, its existence would be abundantly justified. I have listened with very great interest to this address of Mr. Read's. I regret to say that I am not endowed by nature with any faculty for mechanics, and I perhaps have missed some of the points which he has made, but I am quite sure of its practicability; I am quite sure it must be very useful for those gentlemen who are better equipped than I am to follow it. I have very great pleasure in moving that the best thanks of this gathering be given to Mr. Read for his able and instructive address, and if he will not consider it too much of a liberty, I shall be glad if he will make a couple of things plainer to me. I did not quite follow his illustration with regard to the seventeen per cent. I should like to have that a little clearer in my mind. Another thing which interested me I would like to understand a little better. I will premise my question by the observation that I haven't a dollar of interest in any power company. I understand that a power company starts with an investment which means the possibility of a certain maximum production. Perhaps I was wrong, but I rather gathered that Mr. Read did not give them a return on their investment which is not utilized, and I cannot quite see how that can be avoided, if the plant is there to provide a maximum of 100,000 horsepower and only 40,000 or 50,000 horsepower is sold; I cannot see how the company can get along unless they have a return on their full capital investment. Perhaps I have misunderstood Mr. Read there.

My principal object in rising, however, was to move that our best thanks be given to Mr. Read for his very entertaining and instructive address, and I would add to that the suggestion that the address be printed, with his permission, in INDUSTRIAL CANADA.

Mr. P. W. Ellis.—We have listened to an eminently practical address. Many of us who have not studied the power question with his thoroughness or have not had the opportunities for investigating the problem that Mr. Read has had, must feel a sense of gratitude for the plain manner in which he has conveyed to us what he has had to say on this important subject.

The two points that Mr. Robins has mentioned I hope Mr. Read will elucidate. Mr. Read has stated that when we buy gas we purchase just what we use, and when we purchase water we pay just for what we use, whereas for electrical energy we also pay for what we do not use. I would like Mr. Read to go into the case where we obtain electrical energy by meter. Do we then only pay for exactly what we use?

I believe practical addresses of this character are very valuable. We should encourage them in every way possible. The address of Mr. Emery was eminently fair and unbiased, one which could be delivered at a workingmen's convention with the same approval as it has been addressed to us. It is just such addresses as that that will harmonize to a very large extent the differences between capital and labor, between employer and employee, addresses in which we discuss the problem in prudent, careful terms, recognizing that each has rights, and endeavoring to adjust those rights to the satisfaction of both.

The President.—The mover and seconder have requested that Mr. Read address himself to those subjects which they have mentioned, but without the permission of the Convention I think we would not have sufficient time. It is getting late, and we have quite a little business yet to dispatch. If you wish to hear Mr. Read, I shall be delighted to have him speak. I would suggest, however, that Mr. Read see these gentlemen privately afterwards or discuss the points in a later issue of INDUSTRIAL CANADA. I think that would cover the question.

The President put the motion, which was carried with applause.

The President.—I have much pleasure in tendering you a hearty vote of thanks, Mr. Read.

Mr. Read.—I would like to say as to the points that have

been raised, I should only be too glad to answer them either in the daily press or INDUSTRIAL CANADA or in any engineering paper, or in all of them. I have an answer for them.

The President.—We will take advantage of your offer, and have them in our INDUSTRIAL CANADA.

RESOLUTIONS.

The President.—We have before us the resolutions presented by the Resolution Committee. The Secretary will read them to you.

The Secretary read the following resolutions of thanks, which were carried with applause:

Resolved, that the heartiest thanks of the Canadian Manufacturers' Association be tendered

1. To His Honor the Lieutenant-Governor of Ontario and Lady Clark, for their splendid entertainment at Government House.

2. To the Chairman, the Executive Committee and members of the Toronto Branch, for the magnificent hospitality extended to visiting delegates to the Convention, as well as for the conveniences and comforts they have provided, which have contributed so much to the success of the meeting.

3. To the Canadian Pacific and Great North-Western Telegraph Companies, for the privileges which they have so kindly placed at the disposal of members.

4. To the President and members of the National Club, the Royal Canadian Yacht Club and the Lambton Golf and Country Club, for their courteous invitations.

5. To the transportation companies, for the reduced rates which they have so generously accorded.

6. To Mr. Arch. Blue, Dr. B. E. Fernow, Mr. L. G. Read and Mr. Jas. A. Emery, for their exceedingly interesting and profitable addresses with which they have favored us.

7. To our Treasurer, Mr. Geo. Booth, for the care with which he has continued to watch over the Association's finances.

8. To the Press of the Dominion, but of Toronto more particularly, for the publicity they have given the Convention proceedings.

Re Japanese Treaty.

The Secretary read resolution *re* Japanese Treaty as follows:

Whereas, there can be no doubt that it is the desire of all intelligent people in Canada that we should build up a trans-Pacific trade with Asia, from the results of which all parts of Canada, and especially British Columbia, would greatly benefit,

And whereas, it cannot be doubted that the existence of the present treaty, favorable as it is in many respects to Canada, has already done a great deal towards the development of trade with Japan, and the abrogation of the treaty would not only be disastrous so far as the existing trade is concerned, but all hope of future extended relations with Japan would have to be abandoned,

Be it resolved, that we do urgently recommend that the Dominion Government, while giving due consideration to all interests in Canada, should take no hurried action towards the abrogation of the treaty which stands to-day as a basis of the friendly alliance between Britain and Japan.

Mr. P. W. Ellis.—The resolution on the face of it seems justifiable in its request that the Government move slowly. We will all agree with that. But it is not what the resolution says, but what it does not say, that is the dangerous part: it seems to imply something which we hold back and do not in the daily press or INDUSTRIAL CANADA or in any engineer- set forth frankly. It is rather late for a full discussion of so important a resolution.

Mr. George.—I don't think it is well to dodge the issue; I think that this Association, representing as it does the industrial interests of Canada so largely, being the most representative organization in the Dominion, should not be afraid to say what it thinks on this question. If it is the opinion of the meeting that we should not do so, that opinion, of course, must prevail. My own individual opinion is that it will be perfectly proper and right for this Association to suggest to the Government that it should go slow and consider fully what the effect would be before it accedes to the demand that has been made upon it, to abrogate the treaty which has lately been entered into. Such an action would nullify the



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possibilities of present extension of trade between Japan and our West. British Columbia must look, in my opinion, very largely to the East—Japan and China, for the extension of its trade. I do not think we are entering on any dangerous ground in asking the Government to consider carefully and fully every interest in this country before it accedes to the demand which has been made upon it, to abrogate the treaty existing between Great Britain and one of her allies.

Mr. Robins.—This matter, to my mind, elevates itself vastly above any question of trade. The Mother Country, to which we are all, I hope, so proud to belong, has felt it to be in her best interests to enter into an alliance with Japan. I

believe that to be the most statesmanlike and far-reaching treaty which has been made by the Mother Country in one hundred years. If we are not prepared in Canada to subordinate our interests to some extent to the greater interests of the greater community, then I think it is a very serious condition of affairs. I think we may safely leave these things to the judgment and wisdom of the Mother Country, and we must be prepared, as all communities and as all business partnerships are, to yield our views to that of the majority. It seems to me quite sufficient that Great Britain has made this treaty with Japan. I think it ill becomes any Province of Canada to do anything which would disturb those relations. I also think it ill becomes any part of the Anglo-Saxon race, which has penetrated every part of the world, and which has claimed the right of the enjoyment of life and liberty in every part of the world—our nation has fought wars in defence of that principle—I say I think it ill becomes any section of the Anglo-Saxon race to refuse admission to any part of the British Empire to any well-behaved man, whatever the color of his skin. I therefore do not hesitate to stand by the resolution of this Association, or even go very much farther than this resolution. This idea of mobbing men when they come here to behave themselves and observe the laws of our country, is a disgrace to our civilization. I think, therefore, that this great representative body of the Canadian Manufacturers' Association should not be afraid to put itself on record and give the Government at Ottawa such support as a resolution from this Association would give to it; and also to manifest to the Mother Country that we are not going to put the little trade interest of our section of the Empire above the greater interests of the great Empire.

The question was called for.

The President put the motion, which was carried.

The Secretary read the following communication from the Montreal Branch, and stated that it was considered first by the Tariff Committee of the Association, referred by them to the Executive Council, and now comes from the Executive Council to this meeting:

The Woollen Industry.

"Whereas, it has been brought home to the members of the Canadian Manufacturers Association that some important branches of the woollen industry of the Dominion have languished during the past ten years, throwing many hundreds of workpeople out of employment, closing up many factories and causing serious loss of invested capital; and,

Whereas, the recently enacted tariff has failed to adequately provide for the protection and development of these industries,

Be it resolved, that it is the opinion of this Association, in Annual Meeting assembled, that the Government of Canada should take immediate steps to fully investigate the needs of these industries and to adopt such tariff measures as will again enable them to develop satisfactorily and to compete on a fair basis with the products of other countries where the scale of wages and the standard of living are far below that of our workpeople. And be it further resolved, that the Tariff Committee and the Executive Council be hereby instructed to co-operate in every possible way with the Woollen Section in properly presenting its case to the Government for attention.

The President.—I think that communication will have to be referred back again to the Tariff Committee to deal with. If that is your pleasure, we will refer it to the Tariff Committee.

Consent was given.

Invitation from Montreal.

Hon. Mr. Rolland.—Gentlemen, I would propose that our next Convention be held in Montreal, if it the pleasure of the Association. (Applause.)

Mr. Ballantyne.—I would like to supplement and confirm what our Vice-President has said about inviting the next Annual Convention to the City of Montreal. I sincerely trust the invitation will be accepted. The members of the Canadian Manufacturers' Association of Montreal will be most happy and pleased to have you come, and we will do all in our power to make your visit profitable; and the city generally, I can assure you, will be most happy to have you. As a member of the Montreal Harbor Board, I can promise you, if you come next year, to take you down the river on one of the steamers, and the ladies also. We would like to show you the harbor and the improvements that are going on. I only mention that as one of the many things we hope to have the pleasure of doing for you. I trust that when the time comes Montreal will be selected as the next meeting place. (Applause.)

Mr. Ewing.—I want to supplement the invitation of the Hon. Mr. Rolland and Mr. Ballantyne. It is the unanimous wish of the Montreal members that the next meeting of the Association should be held there. I don't know that we can give you as pleasant a time as we have had in Toronto, but we will do our best, and you will be entertained there to the best of our ability. I hope the meeting, before we close to-day, will decide to hold the next Convention there. Last year in Winnipeg it was referred back with a little uncertainty. We would not like to have any uncertainty. We want, if possible, to rival Toronto in the magnificent reception they have given us here this year. I know we have a big task before us. So I would ask the present meeting to decide without further delay to meet in Montreal next year.

The President.—I feel satisfied the Manufacturers' Association will enjoy themselves if they decide to go to Montreal. However, this is a matter that is generally left in the hands of the Executive Committee and Council of the Association. We have also an invitation from Vancouver by telegram. If it is your pleasure, we will pass it on to the Council to decide at as early a date as possible.

ELECTION OF OFFICERS.

The Secretary announced that the Hon. J. D. Rolland had been elected President for the ensuing year.

Mr. Cockshutt.—Gentlemen, I can assure you I can congratulate the Hon. Mr. Rolland on being elected to this office. It is an office which is a great honor, and I feel satisfied he will do credit to it. He is from Montreal, and he is the first French-Canadian that has ever been elected President of the Canadian Manufacturers' Association. (Applause.) I congratulate him most heartily; I hope that the year will be one of progress, and that everything will go well with this Association.

On behalf of myself, retiring from the presidency, I desire to thank you, the members of the Association who have been here; you have helped me by your friendly advice and by your presence; and I also desire again to thank all the members of the Association for the very kindly way in which they have treated me throughout the year. I appreciate it; it has helped me. If I have been of any service in the least to the Association, I consider that sufficient honor. I thank you, gentlemen.

Hon. Mr. Rolland.—Gentlemen, I can assure you that I appreciate this great honor which you have done me, and you have my sincere thanks. I have been connected with the Manufacturers' Association for years past. I remember when we formed our organization in Montreal in 1879 I had the honor of being one of the Vice-Presidents; I was President of the Quebec Association. Now being made President, I can but promise on my part to put forth my greatest efforts to extend the power and scope of the Association. I rely very much on the counsels of the Executive Committee, which you have named, to accomplish the work in connection with the

important questions which we have before us in the present year.

Mr. Cockshutt deserves a great deal of credit for the excellent manner in which he has conducted the affairs of our Association during his term of office. I have had occasion to follow him in the different work of the Association, and I assure you he has been devoted to the interests of our Association.

Again, gentlemen, I appreciate more heartily than I can express to you my election to this high office.

Retiring President Thanked.

Mr. Younge.—Mr. President and Gentlemen of the Convention,—I feel that the year's work would hardly be complete without the Convention expressing in a tangible manner the thanks which I am sure we all have in our hearts towards the retiring President. The work has been very ably conducted during the year, and Mr. Cockshutt has set the precedent of being the first President of the Association to visit officially all the Branches during his term of office, a visit which, from the broad standpoint of his position, must surely mean a great deal to the Executive Council of the Association in carrying on its work; so that in addition to expressing upon our records our earnest thanks to him, I would move that the Executive Council prepare some tangible token of our appreciation to be presented to him later on, on some fitting occasion. (Applause.)

Mr. Rowley.—Mr. President, let me congratulate you upon your appointment. Permit me to say in seconding Mr. Younge's motion, that I think it would be proper to have the token to be presented of such a character that his worthy wife may have full benefit, use and advantage of it; because I am sure we all feel that the President is not the whole thing. A good President should have a good wife. I suppose nearly all of us have the pleasure of Mrs. Cockshutts' acquaintance. I feel, at all events, and I hope I voice the feeling of everyone here, that whatever the testimonial should be, it should be one in which Mrs. Cockshutt should enjoy the full advantage.

The President put the motion, which, on a vote having been taken, was declared carried with applause.

The Secretary read the names of the various Vice-Presidents who had been elected, which was received with applause.

The Secretary announced that Mr. George Booth had been re-elected Treasurer.

Mr. Booth.—I want to express my thanks and appreciation of the honor. I am proud and pleased to serve you. Such service is made very easy on account of the pleasantness of the assistance that is given by all the office staff. (Applause.)

The Secretary read the election of the various provincial representatives.

The President.—Gentlemen, you have heard the report of the election of your officers. I have no doubt you agree with the choice that the Association has made. I trust that these gentlemen will work earnestly in the interests of the Association, and that each Committee which will be formed will have a splendid report to present at the end of its term of office.

The Secretary read the report of the Committee on Nominations for the various Standing Committees.

Mr. P. W. Ellis.—I wish to move a vote of thanks to our Secretary, Mr. G. M. Murray. Our Association has been very fortunate during its history in the Secretaries it has had engaged in its service. Not the least successful of these nor the least devoted to the interests of this Association has been our present Secretary, Mr. Murray. The organization has grown to large proportions, and with that growth has grown the responsibility of the office of Secretary. A great deal depends upon him. The manner in which this Convention has been carried out, the details of which have been so ably arranged and carried out, is something worthy of the warmest approval of this Association.

I wish to couple with Mr. Murray the able staff he has associated with him in the work of the Association, the Managers of the various departments and the Secretaries of the different branches,—I regret time will not permit me to name each in person, but I say this, that together they are devoted to your interests and form a very capable organization. I wish to thank them. I am quite sure I voice the feelings of everyone present, and of all our members, in expressing to Mr. Murray, our General Secetary, our approval of the manner in which he has conducted the affairs of this Association since his appointment.

Mr. Cockshutt.—I desire to second that motion. I feel that Mr. Murray has done very much for the Association; he has



Characteristic Poses

shown himself to be systematic, and to be persevering; and I am sure he will carry out the policy formulated by the Association in the very best possible manner. I think he deserves all credit for the way in which this Convention has been conducted.

The motion was carried.

The President.—I have had occasion since I have been connected with the Association to see the work of Mr. Murray, and my experience is that an Association may have a very good President and set of officers, but the Secretary is the one who will have to do most of the work. Our Association has been very fortunate in its selection of Secretaries in the past,

and I trust Mr. Murray will receive the support which he well deserves.

Mr. Murray.—Mr. President and gentlemen, this very unexpected vote of thanks finds me quite unprepared with words to express to you adequately the feelings which I experience at this moment. I assure you I appreciate your vote of thanks more than I can very well say. My regard for truth, however, compels me to take exception to some of the remarks that have been made, lest you should go away with the idea that the duties of the Secretary are more important than they really are. While it is true we Secretaries have to work long hours sometimes, I realize all too clearly that it is, after all, to the directing influences of the members of our Committees that we are indebted for the work of our Association.

As I pointed out in my report to the Association, without that help and that assistance our progress would be very limited; and I feel that particularly in my own case, if it were not for that assistance I would deviate very frequently and widely from the straight and narrow path of business wisdom.

I am exceedingly glad, on behalf of the staff whom you have so kindly coupled with me in this resolution, to be able to thank you most cordially. I think that they have given you the best that was in them, and if their efforts are appreciated in the manner that this motion seems to indicate, I know that they will consider that ample reward. (Applause.)

Mr. McNaught.—I wish to make a suggestion in regard to the speech of Mr. Emery delivered this morning. One of the members stated to me that he would like to be able to distribute that speech amongst his employees. I would, therefore, suggest that the Secretary be requested to keep the type up and prepare it in pamphlet form and give the members an opportunity of purchasing as many copies as they like to distribute amongst the employees in their factories.

Mr. Phillips.—I second the suggestion. I will take 500 copies at any price.

The President.—During the delivering of this speech I thought it would be a good idea to have it translated into French, because I believe it would be of as much value to the French working people as to the English.

The President.—I will now ask you to name an auditor.

Mr. Tindall moved, seconded by Mr. P. W. Ellis, that the present auditor, Mr. Eddis, be re-elected. Mr. Tindall stated that he did not think the Association could get anyone who would be more competent and who would do the work more faithfully than Mr. Eddis had done.

This was carried.

The President.—Gentlemen, before leaving, I must thank our Toronto members for the grand reception they have given us. I have also appreciated the attendance here of a large number of members who have important business to attend to, but who have been attending these meetings regularly during the last three days. This meeting has proved of great interest to the members of our Association. I thank you again sincerely for your attendance, and now that we have finished with our work, it seems that there is something more for us in a social way. The Toronto people have provided us with a good number of social functions, and this afternoon we are to have the honor of being received by the Lieutenant-Governor. I am also glad to announce that Sir Wilfrid Laurier has arrived, and will grace our banquet this evening.

The Secretary made the announcements, after which the Convention adjourned at 1.30 p.m., with the singing of the National Anthem.

THE GOVERNMENT HOUSE PARTY.

On the afternoon of the last day the members were entertained right royally by the Lieutenant-Governor and Lady Mortimer Clark, in the beautiful grounds of Government House. The charming garden which surrounds the viceregal mansion was thronged with guests, while a big marquee served as a reception-room. Of the many social features of the Convention, none was more pleasant than this. Sir Wilfrid Laurier and many other guests were present to meet the members and their ladies. A regimental band played an excellent programme during the afternoon. The members appreciated most heartily the kind courtesy of Sir Mortimer and Lady Clark.

A THEATRE PARTY TO SHEA'S.

While the men were regaling themselves at the banquet, the ladies were indulging in a second theatre party, this time at Shea's. The function was most successful. A large number of ladies attended and enjoyed a good vaudeville performance. After the performance lunch was served in the tea-room of the King Edward.

MR. READ'S REPLY TO ENQUIRERS.

Answer to Mr. Robins's request "for an explanation of Mr. Read's illustration of the 17 per cent.:

A yearly coal bill of $4,200 is equal to 17 per cent. on $25,000—the point being that if the manufacturer can get the rate of interest down to 6 per cent., he should try to do so; likewise if he can get his coal bill down to $1,500 he should do so. The latter is quite possible. I use the hypothetical case of $25,000 at 17 per cent. merely as an illustration.

As for Mr. Robins' point:—"If the plant is there to provide 100,000 horse power, and only 40 or 50 thousand horse power are sold, how can the company get along unless they have a return on the entire investment?"

To be sure—capital is entitled to a just return, and I do not deny it this right. My contention is, however, that Electric Light and Power Companies which expand themselves into public utilities undertake to charge the consumers *far more* than a just return upon their investment—as evidenced by the fact that a certain Light and Power Co. in the Dominion (I am informed) has seventeen millions of dollars of water in its capital stock.

Answering the point raised by Mr. Ellis:

"When we obtain electrical energy through a meter, do we then only pay for exactly what we use? As Mr. Read states is the case with gas and water."

1. The consumer is required (almost invariably) to agree to pay a minimum yearly amount, whether he uses the power or not. The Water and Gas Company does not exact this.

2. If the consumer insists upon buying electric current through a meter, paying only for what he actually uses, with no minimum or stand-by charges, he will find that the rate charged him is exorbitant. Take even a rate, under such conditions, of only two cents per Kilo-Watt hour. This is equivalent to $60.00 per annum per K. W. or $40.00 per annum per horse power.

And I again submit the proposition that since the consumer can make his own power in his own premises for $25.00 (and that, too, on a 60 per cent. average load), why should he pay forty?

3. If the public power company is prepared to meet the cost at which the consumer can produce his own power, it must name him a flat price of not more than three-quarters of one cent per actual *Brake Horse Power Hour* delivered to the consumers' motors, and even then the consumer must stand from 10 to 20 per cent. loss in motor efficiency—to say nothing of the fact that in his contract with the public power company (like all other public utilities) he must absolve the Company from all consequential damages "due to causes beyond its control."

That is to say, it makes practically no difference what happens, if the power fails and the consumers plant is shut down, he will find redress beyond his reach.

The Convention Banquet

THE banquet hall of the King Edward was filled when the guests took their seats on the evening of the last day of the Convention. In the words of Sir Wilfrid Laurier, "the banquets of the Canadian Manufacturers' Association have become as much an institution as the Association itself." It was fitting that the great Convention which had just come to a close should be celebrated in the best banquet of the Association's history. It was. The menu was satisfying, the entertainment was of the best, and the speeches were of a high order of excellence.

The surroundings were conducive to pleasure. The banqueting-room, always beautiful, was made additionally attractive by a fine display of maple leaves and flags. Cut flowers decorated the tables in splendid profusion. An orchestra played a popular programme during the banquet. The souvenirs, the beautiful cover of the menu card, supplied by the Harris Lithographing Co., the ash tray presented by the Booth Copper Co., the rubber boot match-holder presented by the Putta Percha and Rubber Mfg. Co., the miniature baths of the Standard Ideal Co., the mats upon which the courses were served, presented by the Toronto Carpet Co., the ball-bearing paper-weights of the Chapman Double Ball Bearing Co., the memorandum books of the Rolland Paper Co., the medal of William R. Perrin & Co., the special cream bottle of the City Dairy, all met with hearty approbation, and were the source of much amusement.

But fine as were the menu and the entertainment, the outstanding excellence of the banquet was the speeches. Few who were present will ever forget the appropriateness of Sir Mortimer Clark's utterance, the lofty theme and the rhetorical finish of Mr. Geo. T. Blackstock's speech, the felicitous expressions and the sustained dignity of Sir Wilfrid Laurier, the keen, direct, business address of Major Stephens, and the vigorous and stirring speech of the Hon. J. P. Whitney. The President, in his inaugural address, set a high standard for the Association to keep up during its coming year of activity.

At the head table with the Chairman, Hon. J. D. Rolland, were Sir William Mortimer Clark, Lieutenant-Governor of Ontario; Sir Wilfrid Laurier, Prime Minister of Canada; Hon. J. P. Whitney, Prime Minister of Ontario; Mr. G. T. Blackstock, K.C.; Major G. W. Stephens, Mr. Geo. Booth, Mr. Graham Gow, Trade Commissioner for New Zealand; Mr. Harry Cockshutt, Mr. C. C. Ballantyne, Mr. Archibald Blue, Mr. R. C. Steele, President Toronto Board of Trade; Mr. R. Hobson, Mr. L. G. Read, Prof. B. E. Fernow, Major Macdonald, Hon. Sydney Fisher, Minister of Agriculture; Hon. Wm. Paterson, Minister of Customs; Mr. D. Lorne McGibbon, Major T. Hethrington, Mr. A. E. Kemp, M.P.

The Chairman, Hon. J. D. Rolland, proposed the health of the King. The toast was honored with great enthusiasm. The guests rose and united in singing "God Save the King."

The President's Inaugural Address

Hon. J. D. Rolland.—Sir William Mortimer Clark, Right Hon. Sir Wilfrid Laurier, and Gentlemen,—It is difficult to tell you how deeply I appreciate the honor you have done me to-day by electing me President of the Canadian Manufacturers' Association for the coming year. It is indeed a great honor. The Canadian Manufacturers' Association is the largest and most influential business organization in our great Dominion, and to be selected as its head is the greatest compliment that I have ever received.

The Association has great reason to be proud of its past Presidents. Since its reorganization it has been most fortunate in its leaders. When I remind you that such captains of industry as J. F. Ellis, P. W. Ellis, Robt. Munro, Cyrus A. Birge, Geo. E. Drummond, W. K. George, C. C. Ballantyne, and your retiring President, have successively held this office, you will understand how keenly I feel the responsibility of conducting the affairs of your organization. I can only say that the Association will have all of my time that the work requires, and in so far as I am able, I will direct your business along the lines laid down by my predecessors.

It is not expected that I should attempt a speech this evening. As your officer, I will be more or less before you all year, and we should give up to-night to our guests. I would, however, like to emphasize the national importance of our organization. Last year at this time we had just concluded a most successful Convention in Winnipeg, and were travelling through the heart of the Great West to the cities of Vancouver and Victoria. It makes no difference where in Canada we may go, the Association is represented, and members are waiting to receive us. We have held big meetings on the Atlantic seaboard as well as in the West, and in London and Paris we have received magnificent receptions. This recognition at home and abroad has had an immense value—difficult to estimate, I admit, but largely responsible for giving confidence to capital and encouragement to brain and energy as exemplified by the enormous development on every hand. To express this in figures I need only say that the census returns of Canada for the years 1901 and 1906 show that the value of manufactured goods has increased from four hundred and eighty-one to seven hundred and twelve millions of dollars, or over sixty per cent.

This enormous gain is particularly gratifying, but from the Government returns of imports we find that dutiable goods show about the same percentage of increase. Even though our factories are expanding rapidly the foreign manufacturer is able to sell greatly increased quantities of his products at our very doors. This fact, taken with the satisfactory immigration returns, is evidence that the present development and expansion of our factories should be continued.

Providence having dowered our country with all necessary resources to the development and augmentation of our large industries, we must preserve to producers the advantages of our national market by keeping for our own workingmen all the employment they might need, in order to encourage and advance the transformation of our richness into products.

A reasonable protection would afford them a great help, to fight the strong competition, they have to meet on our market from the European manufacturers, operating with cheap salaried employees.

The Maritime Provinces have their coal and minerals which enable them to produce with advantage.

In Quebec and Ontario, we have white horse power, the water powers which go on for ever. But what these older provinces require is the opening of railroads, in order to utilize those great water powers which are flowing in the north of Quebec and Ontario, and also the protection of our forests in order to conserve for the future the sources of our water powers.

We have, also, large manufactures, the products of which are even superior to those imported from old countries, as they carried off the highest award, "Le Grand Prix," at the last Universal Exhibition in Paris. The time has come for us to revive a campaign in behalf of the goods manufactured in Canada.

No longer have we, in order to secure the sale of a Canadian product, to disguise its origin. On the contrary, foreign manufacturers are beginning to place the Maple Leaf and the Beaver on their goods in order to sell them.

We have succeeded in obtaining from the Provincial Governments the abolition of taxes imposed on Canadian Commercial Travellers resident in other provinces, as they were a direct restriction to trade in the Dominion.

Those who have had the chance to assist at the different meetings during the three days of this Convention, can now form an idea of the various questions which have been discussed and studied, by reading the different reports which have been adopted, such as "*Transportation, Insurance, Parliamentary, Commercial Intelligence*, and various other reports.

As in the past, I am sure that your Executive Council will consider all questions submitted in a careful and broad-minded manner, and will view all problems of policy from a national Canadian standpoint.

We have a number of prominent guests with us whom we are all anxious to hear, and I will close by again offering my sincere thanks for the confidence you have reposed in me.

Mr. Cockshutt proposed three cheers for the President, which were given amidst applause. The entire company joined in singing "For He's a Jolly Good Fellow," to which the President replied, shortly, in the French language.

The President.—It is my pleasure now to introduce to you our guests of the evening. We are honored by the presence of the Lieutenant-Governor of the Province of Ontario, Sir William Mortimer Clark, who so graciously received us this afternoon. It is with pleasure, gentlemen, that I call on you to fill your glasses and drink to the health of the Lieutenant-Governor.

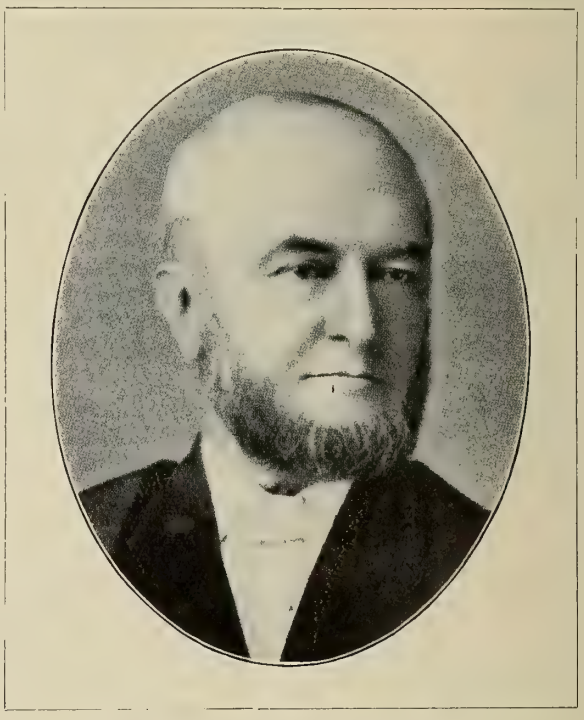
Three cheers were given for the Lieutenant-Governor.

Sir William Mortimer Clark

Sir William Mortimer Clark.—Mr. President, Sir Wilfrid Laurier, Gentlemen and Members of the Canadian Manufacturers' Association,—I beg to thank you most cordially for having extended to me an invitation to be present at this most interesting and distinguished gathering. I thank you for the very cordial way in which you have been kind enough to receive the toast which was so gracefully proposed by our chairman. It affords me very great pleasure indeed to have the opportunity of meeting so many gentlemen from all parts of our Dominion who are interested in the manufactures of our country, and who have brought their intelligence and ability to bear upon that which does so much to develop the material prosperity of this country. I have read with a great deal of interest many of the speeches which have been delivered at this Convention, and I congratulate you, gentlemen, most heartily upon the success which has attended your meeting. The dissemination of what you have said through the press all over our country cannot fail to excite an intelligent interest in those great questions which so profoundly affect the well-being of the community. I was very much pleased indeed to find that you made some departure—I believe it is a departure—from your ordinary proceedings, and that you had certain papers read to you. Particularly was I interested to find that a paper was read to you on the subject of technical education. (Applause.) You all know, gentlemen, what a large part of the success of German manufacturers has been the result of technical education of late in that country. You know that the result of technical education has been to give (in some branches at least of manufactures) a very great pre-eminence to the German manufacturer. In Great Britain, and I presume here also, we have suffered to a very great extent from the want of technical education among members of the mercantile and manufacturing community; and I am very pleased indeed to have heard that your attention has been directed to that subject. When I was at the University this afternoon I could not help thinking of the vast influence which that great institution, the University of Toronto, must have upon the whole community; and I think that that influence will be more and more felt if the manufacturers of Canada will direct their attention more to the subject of technical education, and will seek to have their sons and those in whom they are interested properly instructed along that line; and I think it will contribute very largely to the increase of productiveness in the manufacturing industries of this country.

Agriculture Not Sufficient Without Manufacturers.

We owe, gentlemen, a very great deal in Canada to you; you have largely changed the whole complexion of our country. In the past we have been in the habit of regarding Canada as a purely agricultural country; we have been slow



SIR WILLIAM MORTIMER CLARK
Lieutenant-Governor of Ontario

to discover that agriculture alone will not build up a great country (applause); we have perhaps been slow also to realize that agriculture is not absolutely necessary to the building up of a great country. We have before us an object lesson in the Republic of Venice, a city which was built upon sand banks and on piles, and had no agricultural country round about it, and yet for a thousand years it attained vast pre-eminence in manufacture and trade. We all know how the navy of that small city reigned supreme in the Mediterranean, and even struck terror into the Turk himself at Constantinople. So agriculture is not absolutely necessary to build up a great nation. We know ourselves to a certain extent that agriculture is not the source of the prosperity of Great Britain. Manufactures are the source of the pre-eminent strength of our Empire.

But in addition to the gradual growth of our manufactures we have a magnificent agricultural country behind us to back us up and sustain us. We have through that great agricultural country a field for the consumption of our manufactures, which is growing day by day. But I repeat, we owe a great deal to you, because you have changed the complexion of our country. For many a long year I remember, speaking

particularly of the Province of Ontario, with which I was familiar, our daily papers towards harvest time, and perhaps long before that, were filled with accounts of the condition of the crops; we heard of the rust and flies and mildew and smut and all sorts of things, and we all seemed to feel that the whole country was going down hill most rapidly if these various unfortunate circumstances were too prevalent. We hear practically nothing of that now. We hear sometimes of frost in the North west, but we hear nothing of those things which formed the principal topic of our newspapers in those days. That is because our field of productiveness has been vastly increased and diversified since that time. That is due, gentlemen, largely to you.

A National Spirit Formed by Manufacturers.

You have done also a great deal to raise up a national spirit in this country. I remember that in the time of which I speak the farmers were somewhat apathetic; they seemed to think that there was no hope for them beyond the daily routine of farm labor. There was no field open for the industry and ability of the young men who were raised upon the farm; they had all to seek for support and for occupation in foreign countries, and oftentimes under the flag which was not altogether friendly to us. Now, gentlemen, thanks largely to what you have done, our young men and young women can all find employment in the manufacturing institutions throughout this country. They are not obliged to go abroad. And I think the time will come, and in fact I think it has now come, when we shall require the assistance of all our young people to build up this nation. (Applause.) The development of this new life which has manifested itself in the country has tended largely to increase that national spirit which, I am so glad to say, is now permeating our whole population. It was with the beginning of the institution of manufacturing industries in this country that that new life began to pulsate throughout the whole Dominion, and day by day that spirit is increasing. What the future's undiscovered land may show to us I know not, but in the meantime it is quite evident that throughout the whole length and breadth of this country we find the pulsation of a new life, which can only tend to ennoble the people themselves and bring esteem and regard for the name of Canada throughout the world.

Encouragement to Manufacturers.

Gentlemen, I congratulate you from the bottom of my heart on what you have done. It is entirely out of my province and it would be improper for me to refer to those great questions of tariff which necessarily agitate you and must materially concern you; but I have a very great deal of sympathy in all your desires to give prominence to the manufacturing industries of this country. (Applause.) How that may be brought about it is not for me to say. But still I feel that so many hundreds and thousands of men throughout this country, who are giving their ability, their time, their energy and their great attention to the manufacturing interests of the nation deserve to have their interests carefully considered by all those who have charge of our political destinies. (Applause.)

Our National Wealth Unlimited.

The wealth of this country, as you know, has enormously increased. It has increased in almost every way. It has increased in our mines, it has increased in our harvests and manufactures, and in every way. So much so that one would hardly recognize the Canada of to-day from the Canada of fifty years ago. And that progress seems to be going on day by day; there seems to be no limit to it; and the best feature of it is to find that our whole people are actuated by a spirit of hopefulness and optimism which it is impossible to resist. It seems to affect us all at present. Yesterday I had the pleasure of meeting a number of representatives of the great British journals, who had come out here to examine our new mining industries. They came to see for themselves what these industries were; they did not wish to take it second hand from Canadian reports. They came here not at the invitation of anybody, but as representing the press of Great Britain, to see if it was safe for the British people to put their money into our mining industries. They have gone away unanimously of the opinion that the wealth of this country's mines is almost illimitable. They have seen with their eyes enough to convince them.

Gentlemen, it rests with ourselves to maintain the character of this country and this people; it rests with us to do what we can to lay before the British public honestly and faithfully what we want, what we need, and what will yield them a suitable and reasonable return. (Applause.) It is



GEORGE TATE BLACKSTOCK, K.C.

the fault of the Canadian people if there is a failure in that respect.

I congratulate you again, gentlemen, upon the success which has attended your meeting. I think it is of the very greatest consequence that you have assembled from all parts of our Dominion to consult together upon the great questions which affect your respective interests. You look into each other's faces, you see each other, you gather from each other the ideas and aspirations and hopes which you all entertain, and this meeting, and such meetings as these, will do a very great deal to promote the unity of Canadian Confederation and to let the people of Canada realize more fully that they are one people under the aegis of the Imperial Government. (Applause.)

The President.—Gentlemen, I shall now ask Mr. Arthur Blight for a song.

Mr. Blight responded by singing "Heave, Ho!" followed by the "Maple Leaf Forever," in which the members joined.

The President.—Gentlemen, I have now to call on Mr. George T. Blackstock to propose the toast of "Canada and the Empire."

Canada and the Empire.

Mr. Blackstock.—Mr. Chairman and Gentlemen, my first duty and pleasure in rising to address you to-night is to thank you for the very great privilege of being present at this magnificent gathering; and also, sir, to congratulate you upon the high office to which you have been preferred in this Association, and to express the hope that under your administration its influence may be extended and its usefulness increased.

Gentlemen, I have it in command to-night to propose for your acceptance the toast of "Canada and the Empire," associated with the name of the Right Hon. Sir Wilfrid Laurier. (Applause.) I am glad to observe that that latter intimation meets with your approval and satisfaction. (Applause.) So also it did with mine. In truth, in accepting the task of proposing this toast I contented myself principally with the circumstance that the right honorable gentleman was to respond. I assumed the responsibility with an unwonted gaiety of spirit and lightness of heart, bordering indeed upon recklessness, not only because the right honorable gentleman illustrates in his own person some of the most pleasing features and picturesque consequences of our Empire, but because I felt, however much you might quarrel with my performance, at least you would be unable to detect any flaw in his (laughter), and that perhaps the cloak of the right honorable gentleman's excellence might be sufficiently ample not only to envelope him, but also a rhetorical tatterdemalion as well. I believe, in European diplomacy, in dealing with the political storm centres of Europe and Asia, it is accounted sound policy to introduce a strong buffer between powers with fomented imaginations and bellicose tendencies. Well, I have imitated that to-night, and in case I should be so unfortunate as to encounter your disapprobation, I intend to interpose the dignity and authority of the Prime Minister between me and your resentment.

Mr. Chairman, I am at a loss to know why I, and indeed for the matter of that, why any of the other speakers here to-night are desired to address you. I have been reading some of the rhetorical disquisitions of this Association during the past few days, and I have discovered in them a wealth of imagery and exuberance of fancy which left nothing to be desired; and I felt that any performance of my own, or even of the others who are seated about this board at this end of the room, would be, after all, more or less in the character of carrying coals to Newcastle. But, sir, I cannot spend time upon blandishment to-night. Time has often spoken against me. To-night I speak against time. The Chairman holds in his hand, I will not say the hour-glass, but the half-hour-glass, that marks alike the limits of your toleration and your torture. And after all is said and done, my task ought to be pretty simple; because it is summed up in dropping a nickel in the slot and producing a Prime Minister. (Laughter.)

Well, Mr. Chairman and gentlemen, when one comes to contemplate the British Empire as an after-dinner proposition one is apt to be impressed with the fact that there is an embarrassing amount of geography about such a subject. That Empire I think, now covers about one-quarter of the inhabitable globe, and extends over about sixteen million square miles, if one can realize that. When you take a square mileage like that and try to squeeze it up into dimensions where it will keep company comfortably with a danseuse, a pony of yellow chartreuse and a— (Laughter.) Well, I see with what quick intelligence you take me. I like to address an audience that arrives before the sentence does.

But even in the thought of our territorial domain, sir, there is food for reflection. When Shakespeare cast his patriotic vision over the domain of his day, the curtain fell on the north at the Tweed, on the south at the Lizard, on the East in the English Channel, and on the west in the Irish Channel, and so when he put a speech descriptive of that domain into the mouth of John of Gaunt, when he spoke of

"This royal throne of kings, this scepter'd isle,
This earth of majesty, this seat of Mars,
This other Eden, demi-paradise,
This fortress built by Nature for herself
Against infection and the hand of war,
This happy breed of men, this little world,
This precious stone set in the silver sea,
Which serves it in the office of a wall
Or as a moat defensive to a house,
Against the envy of less happier lands,
This blessed plot, this earth, this realm, this England,"

he meant England, and England alone. No Scotchman, no Irishman got inside the canvas. Indeed, Scotland was then practically a separate and independent kingdom, and Ireland—well, it was a foreign country, where occasionally the adventurous Englishmen went, in the words of the old Scot, to "raise a row and ruction, to tread on the tail of me coat," and perhaps also to raise—well, Donnybrook Fair, and come back with a broken head. Since that time there have been very great changes. We are apt to impute a venerable age and antiquity to the British Empire. So far as the islands composing Great Britain and Ireland are concerned that is an accurate description. So far as that thing which we call the Empire in contradistinction to those islands is concerned, that is not so.

The Creation of Three Centuries

In the time of which I have been speaking, between three and four hundred years ago, things were entirely different. Drake and Frobisher and Hawkins and Sydney had not made those vast voyages of discovery and conquest; Clive and Hastings and the East India Company had not laid the foundations of our Indian Empire. The American colonies had been founded. Canada belonged to France. The great dark continent lay wrapped in the mist of centuries, and the great Australasian continent under the Southern Cross, and New Zealand, were unknown, and the South Sea Islands were inhabited by savages. I think the earliest colony of the British Crown is the colony of Newfoundland, and that dates back, I think, only to about 1612, and was really not securely ceded to Great Britain until 1713, by the Treaty of Utrecht. So that we have to contemplate the fact that this thing that we call the British Empire is the creation of about three hundred years, and in that circumstance, as I have said, there is food for reflection. Why, Mr. Chairman, in that Empire within the last eighty years there have been most notable additions of names which now are household words—Natal and Figi, the Punjab, Upper and Lower Burmah, Nyassaland and Zululand—all these vast territories, not to speak of those that have lately been added to the Empire—all these and a dozen or two dozen more, have been added within the last eighty years; and it was these mighty achievements accomplished within a comparatively short time that unchained the imagination of Mr. Webster fifty years ago, when, standing in the American House of Congress, he described Great Britain as that power which had dotted the world with its vessels and whose morning drum-beat followed the sun, and, keeping company with the hours, encircled the whole globe with one continuous strain of the martial airs of England. (Applause.)

Well, sir, we are to discover in this circumstance that it is with nations as with individuals—the time does not come when they can rest. They must go forward or they must go backward. It was along this line and in this sense that a few years ago was made that sagacious observation of that great man, the late Marquis of Salisbury. Contemplating the nations of the earth, he observed that amongst them there

seemed to be great, powerful nations with intellectual powers of extension and organization; and surrounding these and interlaced with them were dying nations, inert and incapable of these qualities; and, as in the past these nations have, not through the lust of conquest, as is sometimes supposed, but out of the very necessities of their own existence as well as ours, passed under our domain, so we ought to be persuaded that in the time to come similar conjunctures will arise entailing upon us similar consequences.

The Empire a Joy.

Sir, that Empire is no barren sceptre; it is no idle thing. In every relationship of life it is a joy, it is an advantage. You cannot have nations any more than you can have individuals without sentiments and without emotions; and there is no human institution which is comparable for excitation of senses and for pleasurable emotions with that of the vast Empire to which we belong. (Applause.) In the first place, it is a joyous circumstance that we who live in a young and rising community which is bursting the chrysalis of its importance, as it were, that we still belong to a group of nations, the civilization of which and the history of which carry us back almost to the time when history fades into fiction and romance. Then again it is indeed an incomparable joy to know that the great victories by which this Empire was won and consolidated are those that we have a right to share in and to be proud of as well. In addition to that there are the great educational advantages which spring from this circumstance. I have often noticed that the Canadian, in contradistinction to the citizen of the United States, takes a broader and more cosmopolitan view of this world than his neighbor does; he is less insular; he is better informed about the trend and current of the world's thought than his neighbor to the south of the line. And why should it not be so? When you talk of movements in India, when you talk of what goes forward in Australia, when you talk of what is happening in Africa, he has in these things only an academic interest, whereas you have a real and vital interest because you are a component part of that Empire. (Applause.) So it has its educational advantage, strengthening and amplifying our intellectual structure and fibre.

Then again it is a joy to know that in the great brew of bloods and races in the caldron of time which goes to constitute this great British Empire, there is so much that is fascinating. We in this particular portion of the British Empire should be the last to forget—we who have amongst us still, thank God, a splendid contingent remaining of the grand civilization of France lending strength and power to the Empire (applause), and of which we are all proud to know that we have present to-night the chief exponent in the person of Sir Wilfrid Laurier (applause), though the right honorable gentleman has accomplished a great straddle and become a felicitous amalgam of the best qualities of both races.

I might, if time permitted, Mr. Chairman, go on to amplify these remarks that I have been addressing to you as to the sentimental advantages which are derivable from our connection with the Mother Country. I sometimes think when I see at our festive gatherings at Christmas time some of that small contingent whom we have sent abroad in the service of the Empire returning from foreign naval stations and from foreign military stations, and when again I contemplate the return of our own contingents from the fields in South Africa, that in these very circumstances there are added to our commercial and national life strength and lustre and dignity which well repay any sacrifice we could possibly make. (Applause.)

Not only is that so, but on the material side there are advantages. I shall not expatiate upon them to-night. No doubt the right honorable gentleman who will follow me will have something to say of much more interest than I possibly could upon that subject; but unquestionably in the future one of the greatest advantages which is to be derived from the association of these nations with the Mother Country is that in that retort of arduous discussion which has been going on and is now going on, there will at last be found at the bottom the white precipitate of sound sense and reasonable policy by which the various component parts of this Empire will profit in their trade with one another.

Our Responsibilities as Part of the Empire.

Mr. Chairman and gentlemen, those are some of the advantages. But what about the corresponding duties that devolve upon us in respect of them? Here let me say that I think we are hardly living up to what could be reasonably expected of us; and I affirm, sir, here to-night, that there is no part of the British Empire which has derived so much benefit from the English Navy and the English Army as this very Dominion of Canada in which we exist. (Applause.) For one hundred years, living alongside of an ambitious rival, a rival in the past not too friendly, with frequent causes for dispute arising between us, I am not addressing a solitary man in this audience to-night who does not know that it would have been impossible for us ever to have maintained our independence; and that not once, but again and again in those hundred years our country would have been drenched with gore, but for the great influence and power of England that was behind it. We have enjoyed the blessings of unexampled peace and prosperity, and we owe those blessings to that navy and that army, to which we contribute at this day scarcely a farthing by way of support.

Someone says, Why don't we? Well, we have got into the habit in this country—it is one of the misfortunes of luxury—of trying to put the responsibility for untoward states of affairs on somebody else's shoulders instead of our own. It is in vain to look to Cabinets and statesmen to take the lead in respect of these things. It is not their business to do so. It is your business to create public opinion which will support them in taking that step when the time comes.

The Oriental Problem.

Even to-night we are face to face with a perplexing problem which touches ourselves and the Mother Country. It is too delicate for me to trespass upon to-night, and I shall make only this allusion to it, that I am sure all of us will tender to the Prime Minister our sincere sympathy in the serious and grave circumstances in which he finds himself, and that we will express the hope, without regard to the petty considerations of party, that some solution may be found for this difficulty consonant with the great interests, local and Imperial, that are involved. (Applause.)

But remember, even in this crisis we depend again upon that navy. What would our position be to-night if the Empire of Japan were dealing with us as an independent and autonomous nation instead of as a part of the British Empire? What would be our position if there hovered on our Pacific coast a Japanese Navy, menacing us in respect to this question with which we are now dealing? So we are once more under the protection of the British Navy, and I cannot help but repeat that it ill becomes us to eternally prate about the prosperity of our country and what we are accomplishing, to sound the horn and summon all mankind to view our prosperity, if at the same time we are not willing to assume some of the obligations, the responsibilities and burdens of Empire. (Applause.)

Should Contribute to the Navy.

I know, sir, the reasons by which we attempt to excuse ourselves in the forum of our own conscience. I know how we say that there must be no taxation without representation. I know how we say that our business is to develop our own

domain, and to leave the Empire to take care of itself. Well, I have seen some not very creditable members of human society sidestep the church and charity subscriptions upon reasons that are analagous to those. No, we owe this to the Empire, and it is our business to supplement this deficiency as soon as we can, or to stop talking about our patriotism. I am quite willing to concede that our principal concern is to develop this particular portion of the Empire which we occupy. I am quite willing to concede that that cannot be demanded of us which can be demanded of the people at home. But yet, making all allowances for these, there is a reasonable contribution to the burdens of the Empire which we ought to give, not with sullen and churlish indifference, but as a matter of privilege and of joy.

Organization of the Empire.

There is one other thing, and I have only time to mention it, for I fear I have already spoken longer than I ought to. The time has come when there falls to those who are in important positions in the British Empire the great task of organizing that Empire. The Prime Minister has lately returned from that interesting Colonial Conference just held in London this summer, and I have no doubt he would be able to tell you that it was a matter of great interest to find the Prime Ministers and others of the various dependencies and colonies of the Crown gathered together and exchanging views upon these important subjects. I am not now talking of organic changes in the structure of the Empire; these will come; but I am talking rather of the creation of that great sentiment of union and cohesion and mutual accomodation, mutual succor and mutual support. Those are prime considerations. The particular form that these will take will follow upon the creation of that sentiment. I claim that we in this Dominion of Canada ought to take the position of leadership in the organization of the Empire. Why not? In the first place, there is a great quality on this North American continent, whether among our neighbors to the south or amongst us here, who live on the northern part of the continent; there is a great, broad, breezy, generous way of looking at things that does not exist in the old world, and why should it? The conditions are not there to produce it. That of itself constitutes one of the reasons why we should be competent to take a leading part in that organization of this Empire which must inevitably take place.

In addition to that, the lines have fallen to us in pleasant places; we have enjoyed peace; we have had an immunity from many of the burdens and troubles which beset the career of other nations; and in addition to that, we have a people constituted by the law of natural selection for this work. They are descended from adventurous spirits, who came into this country to work out a career for themselves. By their clearness of vision and intellectual capacity they are well qualified to take part in affairs of the Empire. So that I claim we ought to have in the great organization of the future the leading part to play in that capacity. Depend upon it, this Empire will not always be administered in the haphazard, go-as-you-please manner in which it has been in the past. Organization is one of the great qualities in which our race is efficient, and to organization we must look for the production of what is best in the Empire.

A High Type of Civilization.

In addition to that, one of the most effective things we can do in the interest of the Empire is to produce in this country itself a high type of civilization. One hundred years ago Oliver Goldsmith wrote that line, "Honor sinks where commerce long prevails." It is true if you look across the line into the United States. Read, if you will, the utterances of public men; read the familiar correspondence of one hundred years ago, and one of the things you will be struck with is the declination in public morality along with the increase of wealth.

Now then, we have on the northern half of this hemisphere the same conditions confronting us as they have over there. Sir, I wish to take no pessimistic view of our condition, but he is little less than a madman who doubts that in many important respects to-day the condition is far, far different from what it ought to be, and we ought to apply some of this organizing power, which His Honor the Lieutenant-Governor has so well said, exists among us and which has produced the tremendous results that have flowed from your organization—I say we ought to apply some of that organizing power to bettering the conditions of the life and the character of the civilization which we have in this country.

These are some of the duties which devolve upon us. I might spend time in amplifying them, but it is impossible at this late hour to do so. My plea to-night is for a finer enthusiasm, for a broader and more generous patriotism, for a loftier conception of Imperial duty and of the destination of the great Empire of which we form a part; the honored instrument under Providence in the uplifting of nations—that nation under the influence of which the bondman has been made free, freedom has advanced its bounds, justice has enlarged its area, the arts and sciences have flourished, religion has advanced, and all the blessings of peace and prosperity have been poured upon us. All this was not of our creation—no, it was bequeathed to us as a sacred trust and legacy by the sires who won it in many a field and flood and court, placing upon us the duty of transmitting it in our turn to our posterity, unimpaired in its strength, untarnished in its glory. And depend upon it, if we are unmindful of this great obligation, if with coward hearts we falter in our duty the rod of Empire will pass to other hands and stouter hearts, and hope, prosperity and greatness totter to their fall. (Applause.)

The President.—Gentlemen, we shall now have the pleasure of hearing the Right Hon. Sir Wilfrid Laurier, Premier of Canada. (Applause.)

Sir Wilfrid Laurier.

Sir Wilfrid Laurier.—Mr. President, Sir Mortimer Clark, Gentlemen,—It is now many years since it was my privilege to sit down at the board, the hospitable board, of the Canadian Manufacturers' Association. Years come and years go, but the annual banquet of the Canadian Manufacturers' Association enjoys the stability of a fixture; it is almost as permanent as the institution. It has been my privilege again and again to be invited, but it so happened that of late years circumstances each year have arisen which compelled me to abstain. This year, however, I made a vow that if the Canadian Manufacturers' Association again invited me to their board, rain or shine, business or leisure, engagement or no engagement, nothing would prevent me from tasting their food, trying their wine and enjoying their company. And if I may be permitted to speak my own mind I would say that there was for me this year a further inducement in the fact that the meeting of the manufacturers in this year 1907 was to take place and took place in the good City of Toronto. Gentlemen, I am an admirer of the City of Toronto; I am a lover of the City of Toronto. Perhaps there may be some amongst you who will be surprised at what I say, but, gentlemen, there is no cause for surprise. Someone perhaps may say that I might apply to myself the words of that Irishman who, being reminded that he should talk for posterity, answered, What has posterity done for me? and perhaps one might say that I should observe also, What has Toronto done for me? (Laughter.) But, gentlemen, my sentiment does not spring from such a source at all. It is a fact which you well know, which is universally acknowledged, that if a mother has a wayward son, it is that unruly boy who is the cause of her most constant devotion. And in this, gentlemen,

you have the reason and the cause of my affection for Toronto—Toronto which killest the prophets, which stoneth them which are sent to her, and how often, heaven only knows how often, have I endeavored to gather her children, even as a hen gathers her chickens under her wings, but she would not. (Laughter.) Let me say, however, that, notwithstanding that obdurate resistance to grace, I am not blind to the good points and qualities of Toronto. No one, for instance, knows better than I do that she is the most hospitable of all cities, and a stranger who visits her, whether friend or foe, is always sure to find in the City of Toronto a generous and courteous welcome. Her quarters are excellent, her public buildings are spacious and lofty, her streets are well kept, her private mansions are artistic, her merchants are princes, her people are bright and patriotic—patriotic according to their lights, though I am sorry to say they are very far from the lights which I would enjoy and approve of—but I am not so unfair or unjust as to hold Toronto responsible for that. It is the cause of circumstance; it may be the mist of the lake; but I have a deep feeling in my heart that this fair city will some day be radiated by another light than the light which she has at the present time.

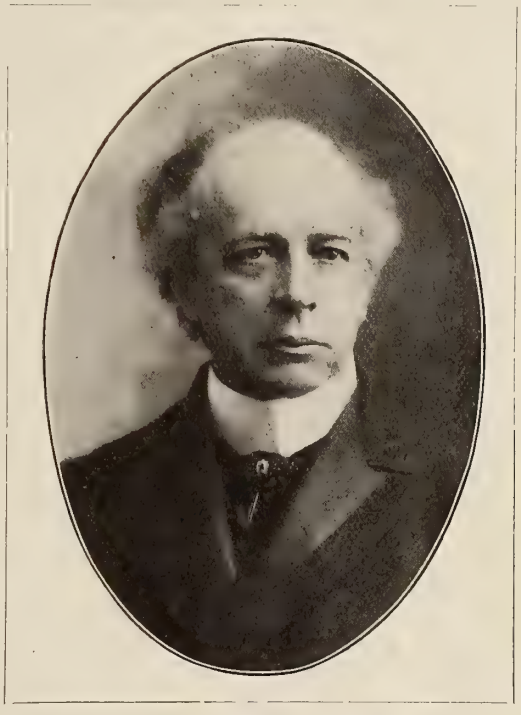
But banter aside, gentlemen, I feel proud in the bottom of my heart. I am prouder than ever, not only of the City of Toronto, but of every inch of Canadian soil. To every nation, as well as to every man, come some day the hour and the opportunity of success. The hour and the moment and the opportunity have come at last to the people of Canada. Canada is no longer obscured and eclipsed by her powerful neighbor. Canada has at last emerged in the full flood of her own light. The great American star is no longer the great attraction of the firmament. The Canadian orb is now high in the sky, and toward that orb is turned the gaze, the expectations, the hopes of all those in other lands who, not being satisfied with their own land, are seeking a field where they will find scope adequate to their ambition and their courage.

Sir, that toast which we have just honored, the toast of Canada and the Empire, has been proposed in very felicitous terms by my friend, Mr. Blackstock. I shall not say that I agree in everything that has been said by Mr. Blackstock, but this is a free country, and we are accustomed to speak our mind; and, Mr. Blackstock having spoken his own views, you will permit me also to speak mine. My conception of the British Empire is not Mr. Blackstock's conception of it. If I have understood Mr. Blackstock aright, his conception of the British Empire is rather the Roman conception of community of organization. My conception is the true British conception of individuality of communities. Canada is a part of the British Empire, the prize gem of the British Crown; and to-day Canada, as a part of the British Empire, boasting of its loyalty to the Crown, has attained the full rank of a nation, a nation without any revolution, a nation without any breaking of the old traditions, a nation without any impairment of that loyalty to the British Crown which is ever dear to every Canadian heart. This has been the result of the conference to which my friend Mr. Blackstock alluded a moment ago, where, in the presence of the Prime Minister of England and in the presence of all the Prime Ministers of the self-governing dependencies, it was asserted and affirmed without a dissenting voice that the relations between the United Kingdom and the Dominions Beyond the Seas were relations of government and governments; that whilst all acknowledged the same allegiance to the same sovereign, still all were on a footing of equality. (Applause.)

Such being the case, all communities which now make up the British Empire being on the footing of equality, the question at once arose, what were to be the relations on questions military, on questions commercial, on questions diplomatic? On questions military there were many who believed we should have unity of organization. For my part, I speak my words as I spoke them in London; my belief is that upon this question and upon all questions the motto is "Imperial unity, but local autonomy." (Applause.) We claim we should have our own military organization. There is no doubt whatever that when England was in danger some few years ago at the time of the Transvaal war the Canadian people were ready to give of their treasure and blood for the help of the Motherland. But, in my mind, it is a very different thing for the Canadian people to go forward in the moment of need and for the Canadian people to join the military organization of England as a part of the community of Europe.

The Sword of Damocles.

What is the condition of Europe to-day? The condition of Europe to-day is a condition of armed peace, almost as intolerable as war itself. There is an old Greek legend, which Mr. Blackstock knows better than I, that a citizen of Syracuse



SIR WILFRID LAURIER

by the name of Damocles was invited to dinner by the despot of Syracuse at a certain time, and being seated at the table and looking above him, saw over his head a naked sword suspended by a single horse hair. Sir, this was a legend; it is the living reality of this day—it is the reality of the nations of Europe. Every one has above its head a naked sword suspended by a hair, by a very slender thread, which may be broken at any moment. The thought of every nation in Europe is of war. The chief part of the revenue of Europe is consecrated to war. But we live on a continent where we never think of war. (Applause.) We live on a continent where we have no standing armies; we are satisfied either on one side of the line or the other to depend for our defence upon a citizen militia. In time of need the blood and the treasure of every Canadian would be at the command of the King, but in time of peace I claim we should follow our own instincts, should follow our own conditions, and not be drawn into the vortex of European militarism.

Imperial Commercial Relations.

This was the condition so far as our military relations are concerned. What about our commercial relations? I approach the subject with some diffidence, speaking as I do before an

assembly of commercial men, of manufacturers. Some ten years ago we adopted the policy of preference to Great Britain, and after an experience of ten years I do not believe that there will be anybody in this audience to find fault with it. It has carried with it its own success. It has not, perhaps, accomplished everything that might have been expected from it, but I have yet to know that any human institution is perfect; I have yet to know that any device of man can carry with it everything that is expected of it. But, on the whole, I claim that it has been reasonably satisfactory and reasonably successful. At all events, though that policy has been jeered at and sometimes laughed at, it has never yet been successfully assailed and never openly challenged. If I had my own point of view, if I had my own way in this matter, I am free to say I would have a different organization in the British Empire. I would have universal free trade in the British Empire. But against it there are three chief objections—Canada does not want it, Australia does not want it, Great Britain does not want it; and if nobody will have it, we need not trouble ourselves about it. Great Britain will not have it for the reason that Great Britain will not limit her free trade, even to the boundaries of the British Empire. Canada will not have it because Canada will not establish free trade, even within the extent of the British Empire.

Can we not have reciprocity of trade within the British Empire? This is a thing for which we are ready in this country, and this is the thing for which they are not ready in the Motherland. I have to tell you as Canadians, for my part, whilst we do not want to be dictated to in our domestic and fiscal policy by the people of Great Britain, so we will not attempt to dictate to the people of Great Britain. (Applause.) Let us have freedom of opinion, and let us resolve, whatever may be the difficulties of the condition, at least to maintain the policy which has been successful for the last ten years.

British Diplomacy and Canadian Rights.

Then, sir, there was another question, our diplomatic relations. How are these to be regulated? Up to the present time the diplomatic relations of Canada and the Empire, in so far at all events as Canada was concerned, have been very much on the lines that my friend Mr. Blackstock would have our military relations—that is to say, carried on by the Motherland. But we have learned by long experience that our diplomatic relations, so long as they are carried on by British diplomats, are not perhaps as successful as we think they ought to be. We have long harbored the opinion in this country that our diplomatic relations would be better carried on if they were in our own hands, in so far as questions affecting us are concerned. Not that we have not the highest regard for the diplomacy of Great Britain; on the contrary, we have the greatest respect for it, because the diplomacy of Great Britain is, as is every other branch in the service of Great Britain, in the hands of competent, able men. But experience has taught us that not only in affairs of state, but in private affairs also, less able men will do better where they are more personally interested in the business than abler men who perform their duties perfunctorily. We take the record of the diplomacy of Great Britain in so far as Canada is concerned, and we find it is a repetition of sacrifices of Canadian interests. (Applause.) We have suffered on the Atlantic, we have suffered on the Pacific, we have suffered on the Lakes, we have suffered wherever there has been a question to be discussed between British diplomats and foreign diplomats. Well, then, we have come at last to the conclusion that upon this point also, in our relations with foreign countries, we would do better by attending to the business ourselves rather than having it trusted to the best men that can be found in Great Britain.

The Treaty-making Power.

It has been long the desire of the Canadian people, if I mistake not, that we should be entrusted with the negotiation of our own treaties, especially in matters which affect trade. This long-looked-for reform has at last come to be a living reality, (Applause) and as I told you a moment ago, without revolution, without any breaking of the old traditions, without any impairment of our allegiance. The time has come when Canadian interests are entrusted to Canadians. Just within the last week a treaty has been concluded with France which affects Canada alone and which has been negotiated by Canadians alone. True it has been done with the full assent of the British Crown, the full assent of the Foreign Office, who have interposed no objection at all, but on the contrary have told us "it is a matter which chiefly concerns you, therefore take the management in your own hands and have the treaty which you want to have." The treaty has been completed. It is not for me to say what it has been or what it is, but I think I can say it will be found reasonably satisfactory for the producers and for the farmers of Canada, and for the manufacturers of Canada also. (Applause)

The Japanese Question.

Sir, we have also another treaty which was negotiated with the full assent and at the request of the Government of Canada, and with the assent of the people of Canada. I mean the treaty with Japan. When we came into office some twelve years ago, we found a treaty had been negotiated between Great Britain and Japan, a treaty of peace and commerce. It was referred to us in that treaty to be or not to be a party to it. We didn't choose at the moment to become a party to it, and why ? Because there were difficulties raised at that time in one important section of the community, on the Pacific slope, as far as labor was concerned. But in the year 1905 and 1906, after the war of Japan with Russia, and the conquest of Corea by Japan, we saw that then the time had come when we might become a party to that treaty; especially as Japan had just passed a law to restrict its immigration to foreign countries. The Americans were our competitors in the Japanese markets, as they are in many other markets. They had the benefit of a treaty which gave them an advantage, a particular advantage in the markets of Japan. Our business men, the manufacturers, the producers of Canada, thought that they should be placed upon a footing of equality with their American competitors and therefore we concluded the treaty . We did it especially because at that moment Japan herself had undertaken to restrict the immigration from Japan to foreign shores, and especially to Canadian shores. Now, since that treaty has been in operation it has been of some advantage to our manufacturers and to our producers. Our trade with Japan has been increasing; it has increased every day. The farmers and manufacturers have got the advantage of it. But some difficulty has arisen on the shores of British Columbia because there has been a greater influx than before of Japanese immigrants. What are we going to do under such circumstances? A certain section of our fellow-countrymen assembled in the City of Winnipeg have called upon the Canadian Government at once to annul that treaty. That treaty has been in operation only for two years. We are just commencing to reap the benefit of it. To denounce it would be simply to act in panic, and for my part, I am not for it (applause); for my part I am not disposed, whether on this occasion or any other occasion, to act in a panic. I want to look about, to think, to reflect, to enquire, before I made up my mind; and it behooves the Canadian Government under such circumstances, seeing the difficulties which have arisen, seeing the condition of things which have not been contemplated, to enquire, to think, to reflect and to see what is the best course to be followed in the interests of the Canadian

people. But to annul the treaty at once, without enquiry, without investigation, would not be, in my humble judgment, playing the part of responsible men. (Applause.) It is the duty, it must be the duty of the Canadian Government under such circumstances to reflect, to enquire, to look about, if need be, to send a commission to have more information and to form their conclusion upon conditions which they know, and upon which they are able to form a deliberate judgment.

The All-Red Line.

Sir, there is all the less inclination on the part of the Canadian Government at present to denounce the treaty, because we are much in hope of having established what has been called the "all-red line." The "all-red line" is a new project, which was launched at the last conference, to have a line of communication from England to the Orient, not only to Japan and China, but to Australia also, over territory of Canada. And why? Because nature has made the Canadian route the shorter route between Europe and the Orient. It is true we are laboring under great difficulties; we have to compete with formidable neighbors; but though the difficulties are great they are not such as to deter us from the goal. (Applause.) I have full belief on my part that this project when it is accomplished, and accomplished it must be and will be (applause), will prove of the greatest possible advantage to Canada at large, to Ontario and to Quebec, but still more to the Maritime Provinces, and to the Province by the sea, British Columbia. I said we must succeed in that. Canada cannot do it alone. We must have the assistance of the Motherland. In this again I say, as I said a moment ago, we do not want to dictate to the people of Great Britain; we do not want to arrogate to ourselves the power to say, "You must do this." But, sir, when I reflect that at this moment the greatest ship, the Lusitania, has been built with British money, when I reflect that the Cunard Line have received a heavy subsidy to build a line of steamers between Liverpool and New York—while I say without hesitation that I do not begrudge and never shall begrudge what has been done or may be done in the future by our Motherland to cultivate better relations with our neighbors—no, I have no such sentiments; the better and the friendlier the relations may be with Great Britain and the United States the better pleased I will be; I want to have nothing but the most friendly relations with our neighbors—I cannot but say to myself: If the British people, if the British Parliament, if the British Government have taken out of the treasury of Great Britain in order to build a line of steamers between Great Britain and a foreign country, can I not expect that the British people, the British Parliament and the British Government will do as much for a line of steamers between British territory and British territory? (Applause.) Again I repeat, we have no intention to dictate to the people of Great Britain; but we may ask them that they shall do at least as much for those of their own kith and kin as they have done for those who at one time were their own kith and kin, but who have severed their allegiance. (Applause.)

Commerce Cements Friendship.

What we ask is a policy which will bind together the British Empire far more than the army will ever do, far more than the navy will ever do, a policy of building up trade and commerce. I noticed that my friend Mr. Blackstock a moment ago quoted these words of Oliver Goldsmith: "Honor sinks where commerce long prevails." I do not harbor that sentiment; I do not believe, for my part, that honor sinks where commerce long prevails. I rather believe that honor will rise where commerce prevails. For, after all, what is there to bind people more potent than the influence of commerce? Let two men trade together and they will be friends; let two nations trade together and they will be friends. Let the policy of peace and commerce prevail, and we shall have peace in the world as we never saw it before. It is because this policy, this principle has been forgotten in the past that we have had wars. But the moment that commerce will arise among the nations, peace and honor will also rise with it.

With regard to the "all-red line," I do not know that it will meet with immediate success; it is surrounded with difficulties; but difficulties have no terror for me, at all events. (Applause.) I have been accustomed to deal with difficulties all my life; and indeed a man is no good until he has had difficulties to overcome. Difficulties we shall have; difficulties we have had; but difficulties we shall overcome. This project shall and will succeed. (Prolonged applause.)

The Legislature.

The President.—Gentlemen, I have now the pleasure of proposing the toast of our "Provincial Legislature." We expect a great deal from the Federal Government, and by past experience we know that sometimes we meet very many obstructions from the Provincial Governments. Those that we have had in the past have lately all been done away with, and I hope that in future the interests of the manufacturers shall continue to be protected. We shall now have the privilege of listening to the Premier of Ontario. I shall call upon the Hon. Mr. Whitney to respond to the toast of "Our Provincial Legislatures."

Mr. Whitney was greeted with applause and the singing of "For He's a Jolly Good Fellow."

Hon. J. P. Whitney,

Hon. J. P. Whitney.—Mr. Chairman, Your Honor, Sir Wilfrid Laurier and Gentlemen of the Canadian Manufacturers' Association,—Unfortunately, I am not so lucky as Mr. Blackstock; I have no buffer between me and the subject of my toast. But, sir, I do not need any buffer; the Ontario Legislature speaks for itself. The people of Ontario spoke, and the Ontario Legislature as it now exists was called into existence. It speaks by its acts. Far be it from me to-night, under the circumstances in which I find myself placed here with you and the distinguished company that you have gathered round about us, to dilate at all upon the manifest virtues of the Ontario Legislature. That would require a volume. A meeting would have to be devoted to that subject alone. I think you will quite understand me when I make the remark that I myself, at any rate, am quite well satisfied with the Ontario Legislature.

Now then, what else shall I say? I ask you gentlemen here present whether a man would not be brave indeed to the point of desperation, nay, to the point of utter and complete recklessness, if he were to attempt to-night to deal with the great questions which have been dealt with in the manner which you have heard by the lofty and stimulating eloquence of my distinguished friend here, whose name and fame is a household word in this Province, or by the clear and decisive utterances and very interesting statements that have been made by our good friend, the Leader of the Government of Canada, Sir Wilfrid Laurier. But, while I would not attempt to deal even at the length of a moment with either of those two great questions, still, as representing the Ontario Legislature, and to that extent unworthily for the time being representing the people of the Province of Ontario, the British people of this section of the Empire at large, let me offer one or two suggestions, in a quiet, unobtrusive way, I hope, with reference to and just touching upon the fringe of the great question of the future of the British Empire. I am not here to deal in detail with it at all. I don't think that there is very much difference, when the whole matter shall be analyzed, between the positions taken by my two distinguished friends to-night. I think there is very little difference, indeed. But I believe this, and no person is responsible for

what I say except myself—I believe firmly this, that the time is now within view, in face of the fact that events of the greatest seriousness and if importance are following each other all over this world with extreme rapidity and at short intervals—events carrying with them consequences of greatest importance to the people in the different portions of the world who are concerned with the outcome of these events—when some step—I do not say what step—will require to be taken in order to decide what shall be the future of the British Empire. Now, I will say to Sir Wilfrid Laurier that when that time comes it will be the duty of the different groups composing the British Empire to sit down together and take counsel as to what the future of the Empire should be, and as to what steps should be taken in order to secure the continuity, permanence and advancement of that greatest good to the human race, namely, the British Empire. (Applause.) I have every possible confidence in the future, and I agree



HON. J. P. WHITNEY

entirely with Sir Wilfrid when he says that any discussion or consideration of that great question, or any question growing out of it or allied to it, must be from the point of view that each group and each Dominion of the British Empire shall speak with an equal voice.

Now, I have thus feebly endeavored to express my view, perhaps out of place, because it does not refer to the toast to which I was allotted, but it is a difficult thing for me when I find myself in my public capacity on my feet at any gathering of intelligent men like this, to refrain from saying what I think on these questions, and that for two or three reasons: First, because I believe it is right that every man should express what he really feels and believes; secondly, because I believe that from discussion and from friction and clashing of opposing and differing ideas the best results come for the people at large; and thirdly, because I feel, in common with every man within the sound of my voice and with every adult citizen of the Dominion of Canada, a great, undying interest in the welfare and continuity and permanence of what I have called already that greatest of human secular influences for good that has ever existed in this world of ours, namely, the British Empire.

Now, Mr. Chairman, I have done. I might perhaps impose further upon your patience and talk politics. I have already talked politics, but it is that higher politics which deserves well of all people who have the best interests of the community in view. With regard to the other politics, I just want to say one word. Some gentleman told me to-day that there was an objection raised to anybody in your Association discussing the question of tariff. I am not going to discuss it at all for reasons that are obvious, but I do not quite understand, and I am sure I may be pardoned for asking if it is possible for a company of manufacturing gentlemen to get together and discuss intelligently their business matters without speaking the word "tariff"?

Voices.—No, no.

I think it is quite impossible. There is an added reason. As I understand it, the people of Canada are united on the question of tariff, and therefore it seems to me it would be indeed bringing coals to Newcastle to discuss the question of tariff.

I have done. I ask your pardon for having detained you at this length under the circumstances in which I find myself here to-night. I am sure you agree with me in felicitating ourselves and each other upon the great opportunity which has been ours to-night to hear these two distinguished gentlemen and to hear the words of wisdom which have fallen from each. As far as I am concerned, I am bound to say that the day will be long away in the future when I shall have forgotten what I have heard to-night from both of these gentlemen, who are a credit to and should be the pride of our common Canada. (Applause.)

Sir Wilfrid Laurier knows, and I know enough of him to be convinced that he understands and appreciates thoroughly, the fact that aside from all conditions of party warfare, which are necessary under our system, he will find nowhere in the Dominion of Canada, nowhere in the Dominions of His Majesty the King, a more respectful welcome, more ardent feelings of friendship and cordial desire to meet him than he will find anywhere in the Province of Ontario. (Applause.)

I shall conclude by offering my fervent belief that when the time comes that the fruition of all our desires with regard to the making permanent and continuous the existence of the British Empire shall have taken place it will have been found in that great work that a large amount of the progress toward it was made in Canada. (Applause.)

The President.—Hon. Mr. Rutherford, Premier of Alberta, was also to have spoken on this toast. I sincerely regret that he was unable to be with us to-night.

Mr. Blight sang in a manner that won enthusiastic applause.

Transportation.

After the song the President said: Gentlemen, I have now a toast to propose which interests the manufacturers very much, and that is "Transportation." Transportation is a question of first importance to manufacturers. Cheap transportation is our great object. During the past year the manufacturers have studied the question of cheaper transportation and better transportation. We have now the privilege and pleasure of having with us to-night Major Stephens, the Chairman of the Board of Harbor Commissioners of Montreal. I will ask you to fill your glasses and drnk to the health of Major Stephens.

Three cheers were given for Major Stephens.

Major G. W. Stephens.

Major G. W. Stephens.—Mr. President, Sir Wilfrid Laurier, Ladies and Gentlemen,—It would be indeed an ambitious task to hold the attention of this distinguished company after its ears had been ravished by the eloquence of the orators that have preceded me. But, sir, as I look out into the faces of

this illustrious audience, as I look into the faces of the men who are upbuilding the industrial supremacy of this Dominion, I see beneath the armor of a stern, alert, keen business exterior the kindliness of heart which encourages me to hope that I may be permitted at this late hour to ask your attention briefly to the serious contemplation of the subject of transportation.

Transportation has been defined as the key with which the wise statesman opened the doors of industrial prosperity. There can be, therefore, no subject which can engage the attention of the Canadian people equal in importance to that which has for its object the increasing of the carrying powers that will bring to tidewater the products of our western plains and in return carry the products of our eastern factories to the homes of the western consumer.

How, then, does this great Dominion of ours stand at the beginning of the twentieth century? How does she propose to encourage a share of international trade to which we are entitled? And how is she laying the foundations to-day for the future that looms high on the horizon before her? Let me for a moment draw your attention to the position in which our great neighbor to the south of us found herself at the opening of the nineteenth century, which the world has accorded to her as her own, and the twentieth century, which to-day the world is according to Canada. In the year 1807, so far as statistical information is obtainable, the population of our great neighbor to the south consisted of five million three hundred thousand people, grouped together in a fringe along the shores of the Atlantic Ocean. Behind these people to the westward stretched out an undiscovered waste of plain and mountain; not one single mile of railway; not one single mile of canal; no roads but the Indian trails; no wealth but the indomitable courage, faith and perseverance of the people who then found themselves in the United States; and upon that faith and upon that courage and upon that perseverance has been built up south of line 49 in one hundred years a nation numbering ninety millions of people, extending from ocean to ocean, owning 217,000 miles of railway in operation, and a country that has commanded the attention of the whole world during that time.

Canada in the Twentieth Century.

When we return to look at things a little nearer home we find that the twentieth century opens upon this Canada of ours with a Canadian people numbering six millions, not grouped or huddled together on the shores of the Atlantic Ocean, but stretched across this great continent of ours in a prosperous series of provinces filled with enthusiastic people, and 26,000 miles of railway in operation. Our great continent spanned by the steel ribbons of three transcontinental roads; a canal system, built by the money of the Canadian people, that has no rival on this continent or any other; our transportation facilities on land and water supplementing the natural position which we are heirs to; these give us, or ought to give us, the hope that the day is not far distant when Canada will command through her natural strategic position, a large share of the international trade that is bound to pass between the Mother Country and the Orient. And, sir, for every ton of freight that is carried over Canadian rails and over the linked waterways of our country the cost will be reduced. The through freight will reduce the cost on every ton of our domestic interchange of business.

Now, sir, we have not had, it seems to me, enough ginger in our appreciation of what we possess in our own country: and at the opening of this century, with the growth and the hopes that are before us, it should mean to every Canadian that he should put his shoulder to the wheel and be serious about working out a nation on the northern half of this continent that in a hundred years will show the United States that the men north of the line of 49 have fibre and brawn in their build that will be worthy of a great neighbor. If in one hundred years the United States has been able to build up a nation with ninety millions of people and starting, as I described a moment ago, under very much greater difficulties than we start to-day, the hopes of the Canadian people ought to be high that in the century that is unfolding itself we too in Canada will be able to give to the world a wondrous development.

Now, I have no right to talk to the Manufacturers' Association on the subject of transportation, because you, gentlemen, in every day's business that you transact are studying and working out the problems of this transportation question. But, sir, during the last few months an honor has been placed in the hands jointly of three Canadians, under an Act of Parliament, to develop your national water highway at the port of Montreal, not on local principles, but in the interests of the whole people of Canada. Associated with me in this honorable work is a man whom this Association has given its highest tribute to, Mr. C. C. Ballantyne (applause), who has studied with you for many years the principles of cheap transportation. He is associated with Mr. L. E. Geoffrion, a prominent merchant of Montreal, and myself to try to solve



MAJOR G. W. STEPHENS

for the benefit of everybody the problem of cheaper transportation. We have only had opportunities during the last few months of looking this question in the face, but I am free to state to you that there is going on in the port of Montreal at the present moment a development to take care of the export and import trade of this country which is costing four millions and a half of dollars, and which, when completed, will give to the shippers of Canada fourteen ocean berths, and at those berths will be found fourteen double-decked, steel and concrete sheds, with a storage capacity of a million and a half square feet, and a working capacity per week of 150,000 tons of freight.

Now, just bear in mind for a moment that there are four millions and a half of dollars being spent to obtain this result, and it is interesting for you and everybody in this country to know whether you are getting four millions and a half worth for your money. Looking around for a comparison, only fifteen days ago the chief engineer of the Commission and myself were in New York. By courtesy of the New York Harbor Commission, we were shown over the docks of the harbor of New York, and we find that New York at the present

moment, in the year 1907, is spending twenty-nine millions of dollars to get an equivalent development to take care of her ocean trade, and she spends those twenty-nine million dollars and gets 120,000 square feet less of space than we are getting in Montreal for four millions and a half. (Applause.)

Apart from that we are putting these terminal sheds into direct communication with the rails that cross this continent and the rails that go into Chicago and St. Louis. It is now possible, after a few months' work in the harbor of Montreal, to have a trainload of dressed beef leave the abattoirs of Chicago and come right alongside of the ship in the harbor of Montreal, where the cargo of the train is transferred from the cold storage cars direct into the cold storage of the ships. What does that mean? Between the first day of May and the first day of August, three months in the operation of this harbor, there were handled one million tons of freight over the wharves of Montreal; and of this amount one hundred and fifty thousand tons were handled direct from car to shed at a cost of one-quarter what it used to cost before the tracks and the sheds were brought into connection. The consequence is this, that 150,000 tons of through freight coming from all parts of Canada and some parts of the United States and going to all parts of the world are being handled to-day at a quarter of the cost it took just a year ago to handle the same number of tons. If you look at the tremendous volume of trade that is being done by the Dominion, the railways are handling fifty million tons of freight in a year and twenty-five million passengers, and if you think that two cents a ton reduction in the handling charges on that volume of freight means a saving of a million dollars, you will see how interesting becomes the problem the Commission is trying to work out in the interests of Canadian shippers. (Hear, hear.)

Now, this is not said in a boasting spirit; it is said along the lines of a policy which was laid down when we took over the duties of that office, and that was that we three gentlemen would cast aside politics or any consideration of that kind and put the best business instincts we possessed into solving the problem of terminals on business lines for the benefit of the business people of this country. (Applause.)

Canada's Natural Advantages

Let me say one word more. Although we are working in the port of Montreal, Montreal is not the only port in Canada. Toronto may some day be an ocean port; judging from the oceans of Port I see on this table, it won't be long before we see the ships and cargoes alongside of Bay or Yonge Streets.

Now, sir, let me ask your attention just for one moment to what Canadians have got. We have got the shortest trade route between the North American Continent, Europe and Asia; that will some day mean a business connection not only with the inhabitants of the British Isles, but it will mean a business connection with millions and millions of people in the Orient. That is one reason why the Federal Government, I believe, has devoted so much attention to the St. Lawrence route. You have got a ship canal coming up to the end of tidewater at Montreal that has no rival in the world. One comparison will show you. The Suez Canal is 99 miles long, 139 feet wide, and has a draught of 26 feet, and through that canal go 20,000,000 tons of cargo every year. The ship canal that is being built, in its present capacity in the St. Lawrence, is 300 feet wide through its entire distance, and between 450 feet and 750 feet at curves, and the draught of water is 30 feet 6 inches from Montreal to the sea. That gives a supreme advantage in water-borne freight coming this way. When you realize that with the eighteen knot ships of the C. P. R. now carrying freight and passengers between Canada and Great Britain the mails of those ships are landed in Chicago before the mails are landed by the great ships that go to New York, you will appreciate the great advantage we enjoy in transportation between this continent and Europe.

Just one other thing. I believe that reforms in the transportation problem must come in the development of the terminals of the railways and the ocean ports of this country. It may be a surprise to you to know that the daily work of a freight car in this country does not exceed 29 miles in 24 hours—it averages between 29 and 33 miles. Think what that means. It is almost a staggering fact to think that the thousands and thousands of freight cars in the service of our railroads in this country only do an average amount of work of between 29 and 33 miles in a day. Why is that? The reason of it is this, that we have been putting huge amounts of money into the rails that cross the continent; we have been putting money into great engines to carry heavy trains, and we have forgotten that these trains going at a great speed must be landed somewhere and must be taken care of when they land; and the consequence is that all the railway companies on this continent are face to face with terminal problems that up to the present they have not been able to solve. One train is held over because the trains ahead of it have not been taken out of the way, and that is the reason why transportation is blocked to such a degree as it is at present; and the problems we business men must try to help the railways solve is to increase the terminal capacity so that trains landing there can be moved out of the way to let others come in.

There is one great effect that our building of railways has. As we silently stretch these steel ribbons across our continent there is being brought nearer together all the uttermost parts of our country; and as the power passes over the wire that leads fom Niagara to the far-off places of commerce, so there is a power of brotherhood and sympathy being built up by the pioneers of transportation in this country against which the roar of hostile cannon cannot avail. Applause.)

The President.—Gentlemen, before I ask you to sing "God Save the King, I must, on behalf of the Canadian Manufacturers' Association, thank our guests for having accepted our invitation and having given us such interesting speeches as we have heard to-night. We thank you very sincerely, gentlemen, for having come from the different parts of this country to assist in our banquet at our thirty-sixth Convention. We have received such hospitality in Toronto that we regret to leave it. To-morrow we have an invitation to go to Hamilton and Niagara Falls. No doubt all of our people wil accept this invitation.

Gentlemen, in bringing this banquet to a close I would ask you to join in singing "God Save the King."

Sir Wilfrid Laurier.—Gentlemen, one word before you part. I am sure it would be improper, after singing "God Save the King," to disperse without drinking the health of the new President, the Hon. Mr. Rolland.

The toast was received with applause.

The banquet closed at 12.15 a.m.

AN INDUSTRIAL POLICY.

THE following paragraph, taken from the Report of the Mosely Commission to the United States on Technical Education gives a fair idea of the importance of technical education on the industrial life and development of a country as it appeared to this body of trained economists and educationalists:

"Our visit has produced a strong impression that the future industries and commerce of America are being directly and profoundly affected by the schools of to-day. The great industrial and commercial firms are abandoning the traditional methods of waiting for apprentices."

Technical education is one of the great conditions of national industrial progress. Why are the best positions in our factories filled by foreigners? Why is Canadian labor feeling this and why is it correspondingly restless? Because technical education, as a part of our industrial policy, has been neglected.

THE EXCURSION TO HAMILTON AND NIAGARA FALLS.

On Friday all care was thrown to the winds. Business was forgotten, and nearly four hundred excursionists set out on a special Grand Trunk train for Hamilton and Niagara Falls. The members of the Association in Hamilton, with the ladies who assisted them, can never be sufficiently thanked for the unbounded hospitality they extended on that day. So complete were the arrangements of the Committees that not a minute was lost of the three hours the party was in the city.

On reaching the station, carriages were in waiting to take the ladies for a drive around the city. Cars and carriages were provided for the men, in which the various groups were taken to the manufacturing plants which they wished to visit. Hamilton was keeping open house for the day. Every factory was thrown open for inspection. And the extent and variety of the manufacturing plants was a revelation. Everyone was impressed with the immense progress the city had made.

After an hour and a half thus spent, the excursionists assembled in the new home of the Commercial Club. Here again courtesy and hospitality were shown in a large measure. Lunch was served to the guests both in the dining-room and in the reception-room. The members of the Ladies' Committee were everywhere in evidence, looking after the comfort of the visitors. It was with regret that the party departed and hastened for the train which was waiting to carry them to Niagara Falls. Before leaving, Hon. J. D. Rolland, on behalf of the Association, thanked the people of Hamilton for their kindness. His words were echoed in the feelings of everyone present.

The committees which carried the event through with such excellent success consisted of Mr. Robt. Hobson, chairman; Mr. C. R. McCullough, secretary; Mr. W. R. Dunn, treasurer, and Messrs. H. P. Coburn, J. A. Publow, Geo. Sweet, R. A. Robertson, F. W. Whitton, H. H. Champ, Col. J. R. Moodie, S. O. Greening, Paul J. Myler, W. C. Breckinridge, F. F Dalley, A. L. Johnson, J. W. Lamoreaux, Jno. Lennox and A. M. Cunningham.

At 2.30 Niagara Falls was reached. While there the party enjoyed the hospitality of the Niagara Falls Board of Trade. The latter body had cars waiting, and took the excursionists up past the Falls to the power plants. These were visited in turn. It was a rare opportunity for the members to see these wonderful engineering triumphs. Even to the most sophisticated the sight of the turbines by which was generated the electricity that was running the street cars in Toronto was the subject of wonderment. Members of the Board of Trade accompanied the different groups, and by their explanations added much to the enjoyment and profit of the trip.

At 6.30 the Board of Trade entertained the excursionists at dinner in the Refectory. The strenuous sight-seeing of the afternoon made this entertainment particularly welcome. Through the courtesy of the Park Commissioners, the Falls were illuminated an hour earlier than usual. The effect was much admired.



Commercial Club Hamilton

At 9 o'clock the special pulled out, and its arrival in Toronto shortly after eleven marked the final close of the Convention. It did not mark the close of the members' memory of it, or of their appreciation of the countless kindnesses that were shown them.

Hardening an ordinary drill in sulphuric acid makes an edge that will cut tempered steel or facilitate cutting hard rock, says *Compressed Air*. The acid should be poured into a flat-bottomed vessel to a depth of about ⅛ in. The point of the drill is heated to a dull cherry red, and dipped into the acid to that depth. This makes the point extremely hard, while the rest remains soft, and hence tough. If the point breaks, it may be rehardened with a little less acid in the vessel.



Hamilton from the Mountain

Officers and Committees of the Canadian Manufacturers' Association 1907-08

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Hon. J. D. Rolland, The Rolland Paper Co., Montreal.

FIRST VICE-PRESIDENT.

John Hendry, B. C. Mills, Timber and Trading Co., Vancouver.

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NOVA SCOTIA.

T. M. Cutler, Acadia Sugar Refining Co., Ltd., Halifax.

BRITISH COLUMBIA.

R. P. McLennan, McLennan, McFeely & Co., Ltd., Vancouver, B.C.

MANITOBA.

L. C. Macintyre, Paulin Chambers Co., Ltd., Winnipeg.

NEW BRUNSWICK.

Chas. McDonald, St. John Iron Works, Ltd., St. John.

PRINCE EDWARD ISLAND.

F. L. Haszard, Charlottetown Condensed Milk Co., Ltd., Charlottetown.

ALBERTA AND SASKATCHEWAN.

A. E. Cross, Calgary Brewing & Malting Co., Ltd., Calgary.

TREASURER.

Geo. Booth, The Booth Copper Co., Ltd., Toronto.

GENERAL SECRETARY.

G. M. Murray, Toronto.

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Geo. Clare, Clare Bros. & Co., Ltd., Preston.
J. A. Coulter, John Morrow Machine Screw Co., Ltd., Ingersoll.
Hon. E. J. Davis, Davis Leather Co., Newmarket.
J. D. Flavelle, Flavelle Milling Co., Ltd., Lindsay.
H. W. Fleury, J. Fleury's Sons, Aurora.
Geo. D. Forbes, The R. Forbes Co., Ltd., Hespeler.
Lt.-Col. W. M. Gartshore, The McClary Mfg. Co., London.
Jas. Goldie, The James Goldie Co., Ltd., Guelph.
D. A. Gordon, Wallaceburg Sugar Co., Ltd., Wallaceburg.
Lloyd Harris, Brantford.
E. G. Henderson, Canadian Salt Co., Ltd., Windsor.
J. Hewton, Kingston Hosiery Co., Ltd., Kingston.
G. C. H. Lang, The Lang Tanning Co., Ltd., Berlin.
R. O. McCulloch, The Goldie & McCulloch Co., Ltd., Galt.
Jas. McLauchlan, McLauchlan & Sons Co., Ltd., Owen Sound.
R. McLaughlin, The McLaughlin Carriage Co., Ltd., Oshawa.
Jas. Maxwell, David Maxwell & Sons Co., St. Mary's.
J. A. Publow, International Harvester Co., Ltd., of Canada, Hamilton.
J. Ransford, Clinton.
Wm. Robins, Hiram Walker & Sons Co., Ltd., Walkerville.
T. A. Russell, Canada Cycle & Motor Co., Ltd., Toronto Junction.
A. Saunders, Goderich Organ Co., Ltd., Goderich.
T. H. Smallman, Canada Chemical Mfg. Co., Ltd., London.
H. Stroud, The Paris Wincey Mills Co., Paris.
J. M. Taylor, The Taylor-Forbes Co., Ltd., Guelph.
R. Thomson, Penmans, Ltd., Paris.
R. L. Torrance, J. B. Armstrong Mfg. Co., Ltd., Guelph, Ont.
J. B. Tudhope, The Tudhope Carriage Co., Ltd., Orillia.
C. R. H. Warnock, The Galt Knitting Co., Ltd., Galt.
C. H. Waterous, The Waterous Engine Works Co., Ltd., Brantford.
F. H. Whitton, The Canada Screw Co., Ltd., Hamilton.
R. J. Whyte, The Frost & Wood Co., Ltd., Smith's Falls.
C. I. I. Wilson, Ingersoll Packing Co., Ingersoll.
D. Wilson, Wilson Bros., Ltd., Collingwood.

TORONTO.

G. Frank Beer, The Eclipse Whitewear Co., Ltd.
Hugh Blain, Ontario Sugar Co., Ltd.
S. B. Brush, Brush & Co.
P. H. Burton, Merchants' Dyeing & Finishing Co., Ltd.
J. W. Cowan, The Cowan Co., Ltd.
R. A. Donald, The Wood Products Co. of Canada, Ltd.
L. V. Dusseau, Gendron Mfg. Co., Ltd.
Thos. Findley, Massey-Harris Co., Ltd.
John Firstbrook, The Firstbrook Box Co., Ltd.
Atwell Fleming, The Atwell Fleming Printing Co.
R. S. Gourlay, Gourlay, Winter & Leeming.
W. P. Gundy, W. J. Gage & Co., Ltd.
S. R. Hart, Hart & Riddell.
Sam Harris, Harris Lithographing Co.
J. B. MacLean, MacLean Publishing Co., Ltd.
J. S. McKinnon, S. F. McKinnon & Co., Ltd.
J. P. Murray, Toronto Carpet Mfg. Co., Ltd.
W. C. Phillips, Phillips Mfg. Co., Ltd.
Thos. Roden, Roden Bros.
A. S. Rogers, Queen City Oil Co., Ltd.
Frank A. Rolph, Rolph & Clark, Ltd.
William Stone, Toronto Lithographing Co., Ltd.
W. B. Tindall, Parry Sound Lumber Co., Ltd.
A. W. Thomas, Copp, Clark Co., Ltd.
J. O. Thorn, The Metallic Roofing Co. of Canada, Ltd.

John Turnbull, The Nasmith Co., Ltd.
Geo. W. Watts, Canada Foundry Co., Ltd.
S. M. Wickett, Wickett & Craig, Ltd.

QUEBEC (OUTSIDE OF QUEBEC CITY AND MONTREAL.

F. J. Campbell, Canada Paper Co., Ltd., Windsor Mills.
J. M. Jenckes, Jenckes Machine Co., Ltd., Sherbrooke.
A. G. Lomas, Magog Woollen Mills, Sherbrooke.
W. H. Rowley, The E. B. Eddy Co., Ltd., Hull.

MONTREAL.

John Baillie, Dominion Oilcloth Co., Ltd., Montreal.
Fred Birks, Belding, Paul & Co., Ltd., Montreal.
S. S. Boxer, The Watson, Foster Co., Ltd., Montreal.
Col. J. H. Burland, Canada Engraving & Lithographing Co., Montreal.
J. C. Casavant, Casavant Freres, St. Hyacinthe.
Wm. Cauldwell, Canada Paper Co., Ltd., Montreal.
Jas. Davidson, The Thos. Davidson Mfg. Co., Ltd., Montreal.
J. S. N. Dougall, McCaskill, Dougall & Co., Montreal.
Jos. Horsfall, Montreal Woollen Mill Co., Montreal.
J. J. McGill, Durham Rubber Co., Montreal.
Wm. McMaster, Montreal Rolling Mills Co., Montreal.
L. H. Packard, L. H. Packard & Co., Ltd., Montreal.
J. M. H. Robertson, The Jas. Robertson Co., Ltd., Montreal.
J. H. Sherrard, Alaska Feather & Down Co., Ltd., Montreal.
Louis Simpson, Montreal Cotton Co., Valleyfield.
Wm. Smaill, Canada Horse Nail Co., Ltd., Montreal.
Lt.-Col. Chas. A. Smart, Smart Bag Co., Ltd., Montreal.
E. Tougas, P. D. Dods & Co., Montreal.
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Steel Direct From Iron Ore.

In a dingy laboratory in the yard of a steel-working company at Los Angeles, Cal., lies a 380-pound ingot of pure steel. It is the most remarkable piece of steel in the world, for it never saw coke or coal; never went through a Bessemer converter or open-hearth process; in fact, its production quite upset all the established methods of making the most used metal of the present century. Behind the ingot is the mysterious furnace in which it was made, and the story of the making of the ingot reads like a romance—a romance of iron and oil and lime and firebrick.

All his life long John Potter has been connected with steel in some one of its many forms. Finally, when he came to Los Angeles, fresh from an eastern blast furnace, he had so clear an idea of the new method that he succeeded in impressing its worth on three or four men, who furnished the money for making the experiments which have now proved successful.

In the centre of Potter's furnace, when he is ready to make a "run" of steel, he piles the crude iron ore, and a mixture of lime and asphaltum. The proportions of this mixture are the whole secret, and it is guarded well, for no man but John Potter, he who discovered it, knows the formula, and he is not telling it, not even to the men who are backing him in the great game for millions.

When this composite mass is all piled up, a jet of crude oil is turned on and lighted. With a terrific heat—up to 3,200 degrees and further if possible—the whole is fluxed, and the resultant steel flows down into a lake in the bottom of the furnace, then to be drawn off into puddles outside the brick wall.

DEATH OF MR. WIGGIN.

It is with regret that INDUSTRIAL CANADA chronicles the death of Mr. William H. Wiggin, Superintendent of the International Harvester Co. of Canada. Mr. Wiggin, while at the head of the big plant with which he was connected, made for himself a fine position among the manufacturers of Can-



The Late Mr. W. H. Wiggin

ada. He was a man of exceptional executive ability—one capable of handling a large proposition in a big way. In his death Hamilton has suffered a distinct loss.

It was always Mr. Wiggin's pride that he rose to his late position from the ranks. He went through a severe apprenticeship in a machine shop and learned his business as he advanced. It was that early experience which gave him his strength in dealing with men. No man in his employ lacked a word of encouragement when such was needed. Nowhere is his loss more sincerely felt than among the staff he had gathered around him.

DEATH OF MR. A. H. CAMPBELL.

The regrettable announcement is made of the death of Mr. A. H. Campbell, Vice-President of the firm of A. C. Leslie & Co., Montreal. Mr. Campbell is widely known among the manufacturers of Canada through his connection with the firm of Frothingham & Workman, and since 1896 as a partner in the firm of A. C. Leslie & Co. He was also Vice-President of the Ryall Screw and Specialty Co.

Mr. Campbell attended the annual meeting of the Association last year at Winnipeg, and made the trip to the coast. The many friends he had on that excursion will be especially grieved to hear of his death. He was a business man of high character, determination and ability.

Wants Position as Superintendent.

"Superintendent—Mechanical Engineer with extensive English and Canadian experience, well up in modern machine shop practice, at present in good position, desires change as Superintendent or Manager—can take full charge and get results. Box 12."

OUR NEW ZEALAND LETTER.

WELLINGTON, September 1st, 1907.

As foreshadowed in my last letter, the new Tariff proposals which were laid on the table of the House by the Government are greatly in favor of Canadian Manufacturers. The list of articles affected by the preferential clause in favor of Great Britain and her Dominions has been greatly increased, particularly in lines which are made by, and have been largely imported from, the United States. This naturally benefits Canada more than any other part of the Empire. Will manufacturers now avail themselves of their opportunity, or are they going, as has been done before, to raise their prices so much that practically the whole of the preference goes into their pockets? If they do, they will enable the foreign manufacturer to compete in this market notwithstanding the preference, and the only result will be, that for the good-will shown, the New Zealander will be penalized by having to pay so much more for his purchases than the preference amounts to, plus profits of the importer.

Should this happen, it stands to reason that the importation of such articles will diminish, or that they will still be drawn from foreign countries as before.

Ultimately when the people find out that by giving a preference to their kinsman, they only induce higher prices the Government will be forced to rescind the preference.

Already the attention of the Government has been drawn to the fact that some of the lines on which preference has been given in the past have proportionally risen in price and that imports of these lines from foreign countries have not perceptibly diminished. Manufacturers who want to cater to this market are earnestly warned not to be led by selfishness, which ultimately must kill the goose which lays the golden eggs.

I enclose a copy of the whole of the new Tariff proposals. It is expected that with the exception of a few lines the proposals will be adopted by the House.

The only item which so far seems to have roused public opposition is the duty on footwear of all kinds. The cheaper grades of boots and slippers are very hard hit, and the importation, if the Tariff is carried, will be practically prohibited. As rubber goloshes have been included, this point is of great interest to Canadian rubber manufacturers, who at present practically hold this market.

As a reason for the imposition of the very heavy duty on the cheaper grades of footwear, Mr. Millar, the Minister of Customs, explained that he wanted to discourage the importation of shoddy made footwear, and wished these goods replaced by the dearer, but more honestly made, colonial article. A shock and a surprise are coming to Mr. Millar when he reads the following paragraph in the local papers, under the heading of "Shoddy Footwear":

A further object lesson in regard to the shoddy nature of the material that enters into the composition of boots and shoes has been afforded to-day in the form of a small exhibit which a number of importers have arranged in one of the committee rooms for the edification of members of Parliament. One object of the exhibition is to show that the proposed tariff changes would press heavily on the poorer section of the community, and would allow the wealthier class to escape further taxation in regard to their footwear. There is a further object, viz., that of showing that the "shoddy," of which so much has been heard of late, enters into that composition of boots and shoes of New Zealand manufacture as well as of those imported.

There are five exhibits of a cheap class of boots said to be the product of New Zealand industry, and to have been purchased in Wellington. These boots, resplendent in all the polish of a faultless finish, have been clashed the full depth

of the sole from heel to toe, and their constituents are thus laid bare. Beneath the thin covering of leather, layers of brown paper, cardboard, and other shoddy materials are disclosed to the vulgar gaze.

A booklet, issued in connection with the exhibition, says: "And yet the trades and labor men and operatives are always howling about the shoddy imported goods, which, after all, are but an infinitesimal proportion of boots and shoes imported into New Zealand, and the worst of them will compare more than favorably with any of the local lot."

Another collection of similar articles has been got together by a Southern member, and will also, no doubt, provide food for discussion when the tariff proposals come before Parliament.

A deputation representing manufacturers, importers and distributors of footwear waited on the Minister on Monday last. The result was that the Minister promised to look into the whole matter again and, as he mentioned specially felt slippers and goloshes, it is presumed that these two lines in any case will be brought back under the old tariff.

It has been stated that a powerful combine of Southern manufacturers and tanners has had a lot to do with the framing of the new duties, and that their ultimate object was to prevent outside competition and then to buy up all the boot manufacturers in the Dominion and to create for themselves a monopoly in leather and footwear. Mr. Millar would be the first man to knock such a combine on the head, therefore, I do not think there is much truth in the rumor, though considering the almost prohibitive proposals color is lent to the assertion.

My attention has been drawn to the fact that Canadian through Bills of Lading very seldom disclose the name of the steamer by which shipment is made. This leads to no end of trouble at this end, and customers get tired of paying drafts against a document which gives them no clue as to where the goods are and when they may expect them; they simply refuse to pay or accept such drafts. Such refusals, justified as they are, are very unpleasant for the shipper, and very often lead to a loss of interest, as the banks are not prepared to hold such drafts over for an indefinite term.

Sometimes it happens that such goods have arrived some time ago, but as consignee does not know where to look for them, heavy storage charges are incurred which customer declines to pay.

Shippers must insist on having the name of the steamer by which the goods travel inserted in the Bill of Lading. It is not sufficient to state by C. P. R. or by "Tyser" line. The name of the ship must be clearly stated.

COSMOPOLITAN.

Manufacturing Opportunity.

Excelsior.—An enquiry has been received at the office from a gentleman contemplating engaging in the manufacture of Excelsior in the Ottawa Valley for an experienced man who could take charge of a small plant of this nature and assist in organizing work. A practical man who has some capital preferred. There is a good field for successful operation where it is proposed to locate, and this is a splendid chance for an honest, reliable man.

Manufacturers' Agency in Toronto.

Manufacturers' agency wanted for good selling lines. We are prepared to buy or sell, on commission. Can give window space and store room on Yonge St. Good references. Apply Box 14, INDUSTRIAL CANADA.

Trade Enquiries

NOTE.—For further information regarding any inquiry mentioned under this heading or the names of inquiries, apply by numbers to the Secretary, at Toronto.

105 **Acetate of Lime.**—Havre, France. merchant can place large orders for acetate of lime, and is desirous of receiving quotations and samples from Canadian exporters.

106 **Agency for Manufacturing Lines.**—A Belgian firm is open to take up agencies for various staple lines for any manufacturing firms desiring to extend their export business. A representative of the firm will be in Canada shortly to interview those intending to do business with them.

107 **Agent.**—Established agent and importer in Hull, having extensive trade connections, invites correspondence from Canadian manufacturers of any marketable commodity (preferably a specialty), with a view to acting as agent on the northeast coast of England.

108 **Agency for Canadian Exporters.**—Wholesale merchant at Zwolle, Holland, offering good references, is prepared to undertake the agency for Canadian exporters seeking a market in the Netherlands.

109 **Agents.**—A Hull firm is desirous of acting as agents for the sale of any marketable commodity of Canadian manufacture, and invites correspondence from firms interested.

110 **Apricultural Implements.**—A South African merchant desires to be placed in touch with Canadian manufacturers of agricultural implements.

111 **Ash Logs and Squares.**—A Manchester firm will welcome prices and descriptions of ash logs and squares from Canadian sawmill owners.

112 **Asbestos Agate, Scrap Tin, Rubber, Wool, etc., Furs.**—A large firm of general import and export agents, long established in Hamburg, Germany, desires c.i.f. quotations for large quantities of the above materials at various European ports. Excellent references. Payment, cash against documents.

113 **Bag Split Leather.**—A Lancashire firm asks for samples and prices of bag split leather from Canadian manufacturers.

114 **Bag Split Leather.**—A London firm will be glad to receive samples and prices of bag split leather from Canadian manufacturers.

115 **Barbed Wire.**—A firm of wholesale general merchants desire to be put into communication with Canadian manufacturers of barbed wire and other fencing material, also all kinds of plain wire in coils.

116 **Blood Albumen.**—A Manchester firm asks for prices of blood albumen from Canadian shippers.

117 **Boxwood.**—An important enquiry is made by a Hull firm for Canadian exporters of boxwood, who can send them large shipments of random sizes, either to Manchester or Liverpool. Lowest prices to be stated.

118 **Boots and Shoes, Shirts, Underwear, Neckties, Hardware, Furniture, Paints and Varnishes, Flour and Leather.**—Young Englishman just starting a general store in St. Kitts, B.W.I., is in the market to purchase the above goods of Canadian manufacture, is highly recommended by well-known Toronto citizen, under whom he has been educated. A growing business is in sight here.

119 **Bones and Bonemeal, Bran, Oil Seed Cake, Animal Hair, Honey and Wax, Fresh and Evaporated Fruits.**—A large firm of general import and export agents, long established in **Hamburg, Germany,** desires c.i.f. quotations for large quantities of the above materials at various European ports. Excellent references. Payment, cash against documents.

120 **Buyer and Shipping Agent.**—A **London** firm is desirous of hearing from Canadian houses requiring a buyer and shipping agent to look after export and import business in Great Britain, and is prepared to act for any parties specially interested in the automobile industry.

121 **Canadian Bacon.**—A **Manchester** firm wishes to correspond with shippers of Canadian bacon.

122 **Carriage Bolts.**—A **Manchester** firm asks for samples and c.i.f. prices of carriage bolts from Canadian manufacturers.

123 **Carriages.**—A **South African** merchant would like to communicate with a Canadian firm manufacturing light carriages, traps and buggies.

124 **Calcium Carbide.**—A **Birmingham** firm wishes to purchase calcium carbide.

125 **Canadian Spruce Boards.**—A timber merchant in **Smyrna** reports a demand for Canadian spruce board (3" by 10" or 12" to 20 feet in length best dimensions), and wishes to correspond with Canadian shippers.

126 **Caviare.**—The representative of a large importing firm in Germany interested in the sturgeon caviare trade, makes enquiry respecting the production of caviare in Canada, and specially in the province of British Columbia, with a view to obtaining supplies.

127 **Cellulose.**—An Italian firm desires the addresses of Canadian manufacturers of cellulose.

128 **Clothes-pins.**—A Manchester firm asks for prices of clothes-pins from Canadian manufacturers.

129 **Coffee Mills.—London, England,** agency is anxious to hear from Canadian manufacturers of coffee mills, which can compete with mills of American manufacture for the English trade.

130 **Dried Fruits.**—A **German** firm asks to be placed in communication with Canadian exporters of dried fruits (chopped apples, etc.).

131 **Dried Apples.—London, England,** house desires to get in touch with Canadian exporters of dried apples. References.

132 **Evaporated Apples.—Rotterdam, Holland,** firm can place large orders for evaporated apples of Canadian origin, and would like to hear from exporters who can fill orders promptly in quantity. References.

133 **Evaporated Apples.**—A **Manchester** firm with large connections, asks for prices of evaporated apple rings and whole apples cored, from Canadian producers.

134 **Excelsior.**—Numerous enquiries have been received from British consumers for excelsior. There is splendid business offering for Canadian exporters who can take on this trade. Quotations to be c.i.f. **London** for long ton (2240 lbs.). Usual price £6 per ton.

135. **Flooring.**—A **South African** firm of timber merchants, builders and contractors desire quotations for birch and maple tongued and grooved flooring, giving the different widths and thickness.

136 **Flooring.**—A **South African** firm of wholesale timber merchants desire to communicate with Canadian manufacturers of tongued and grooved flooring manufactured from birch, maple or pitch pine, f.o.b. St. John or Montreal.

137. **Furniture.**—A **South African** merchant desires to be placed in touch with Canadian manufacturers of furniture.

138. **Flour.**—A **Hull** firm is open to handle shipments of flour on a commission basis from Canadian firms desirous of developing a market in the northeast of England.

139. **Graphite and other Minerals.**—Enquiry is made by a **Lancashire** firm for the names of parties in Canada having graphite properties and other minerals of a similar class for disposal in Great Britain.

140 **Grain Cleaner.**—**A South African** merchant desires to get into communication with a Canadian manufacturer of seed and grain cleaners.

141 **Hides, Timber, Wood Pulp, etc.**—An **Austrian** firm desires to get into communication with Canadian exporters of the following articles: Hides, skins, seeds, oil, timber, wood pulp, pitch pine, drugs, dyes, tobacco.

142 **Hockey Blades.**—A **Manchester** firm requests prices of ash turned for hockey blades, from Canadian exporters.

143 **Knitting and Spinning Machines.**—An enquiry has been received from **Cape Colony, South Africa,** for machines of this nature to equip a knitting weaving and spinning school. Quotations are asked on two machines to start with, c.i.f. London. Correspondent also enquires for wool from Canadian exporters for South Africa. References.

144 **Lawn Mowers, Clothes Wringers, Ice Cream Freezers, Hay and Manure Forks, Hoes, Rakes of all kinds, Wooden Handles of every description, Wash Boards, Clothes-pins, Wooden Tubs and Pails, Washing Machines.**—A large, old-established firm of wholesale hardware merchants in **Antwerp, Belgium,** are in the market to purchase large quantities from time to time of the above articles from Canadian exporters. This is one of the most prominent firms in Belgium, and their enquiry means business. Wish to purchase c.i.f., Antwerp. Payment on receipt of goods.

145 **Leather.**—Well-known Leeds firm of leather importers is open to hear from Canadian exporters of upper and sole leather, with prices, etc.

146 **Lumber.**—A large **South African** firm of wholesale timber merchants desire quotations for fifty standards of spruce lumber, ranging from 2 feet to 9 feet and from 2 inches to 3 inches in thickness.

147 **Manufacturers' Representative and Foreign Buyer.**—Englishman with wide experience and good connections, formerly of the Indian Civil Service, is anxious to hear from Canadian manufacturers who desire a British representative or buyer. First-class references.

148 **Manufacturers' Agent.**—Old-established firm of manufacturers' representatives in **London, England,** with branches and wide connections in every part of the British Empire, would be willing to take on a few first-class Canadian firms who desire representation in any part of the world, particularly South Africa. First-class references.

149 **Manufacturers' Agent.**—Prominent **North of England** firm of manufacturers' agents desire to hear from Canadian firms who want representatives in Great Britain. Have excellent show-room facilities and a large staff of travellers, who call on the best English trade; will sell on commission or do business direct.

150 **Metal Laths.**—A **Manchester** firm asks for c.i.f. prices of metal laths from Canadian manufacturers.

151 **Metal Laths.**—A **Liverpool** firm asks for prices of metal laths from Canadian manufacturers.

152 **Morocco Leather.**—A **Manchester** firm asks for samples and prices of morocco leather from Canadian manufacturers.

153 **Maple and Birch Dowels.**—A **London** firm wishes to purchase maple and birch dowels, 36-inch to 42-inch, 7-16-inch to 12-13-inch.

154 **Manufacturers.**—A **London** firm of manufacturers and buying agents having an established connection in the Far East and in South Africa, is desirous of getting into communication with Canadian manufacturers, with the object of increasing their business with the Dominion.

155 **Neutral Mineral Oil.**—A **Manchester** firm asks for c.i.f. prices of sawn laths, 1 1-8 in. by 3-16 in., in lengths of 3 ft., 3 ft. 6 in., 4 ft., and 4 ft. 6 in., from Canadian manufacturers.

156 **Oak Staves.**—Well-known **Leeds** firm invites prices from actual manufacturers of oak staves suitable for the making of churns, pails, etc., and prices to be quoted for direct shipments.

157 **Oak Logs and Squares.**—A **Manchester** firm invites correspondence from Canadian exporters of oak logs and squares.

158 **Paper and Pulp-board Mills.**—A **London** firm, with branches in Glasgow, Manchester and Dublin, wishes to hear from Canadian paper and pulp-board mills wishing to dispose of their production in the United Kingdom. Wrapping-papers a specialty.

159 **Picture Frame Mouldings.**—A **Manchester** firm wishes to obtain samples and prices of picture frame and other mouldings from Canadian manufacturers.

160 **Plaster.**—**New York** forwarding house enquires for Canadian exporters of plaster who can ship to South Africa. Good business in sight.

161 **Producer Gas Plants.**—An enquiry has been received from **Newfoundland** for producer gas power plants of Canadian manufacture.

162 **Quilla Bark and Sassafras Chips.**—A **Lancashire** firm of essence distillers asks for samples and prices of quilla bark and sassafras chips from Canadian shippers.

163 **Representative.**—A **London** firm is anxious to get into communication with Canadian manufacturers desirous of introducing their goods to the English market.

164 **Roll-top Desks.**—A **Manchester** firm asks for prices and description of roll-top desks from Canadian manufacturers.

165 **Sawn Plaster Laths.**—A **Manchester** firm asks for c.i.f. prices of sawn laths, 1 1-8 in. by 3-16 in., in lengths of 3 ft., 3 ft. 6 in., 4 ft., and 4 ft. 6 in., from Canadian manufacturers.

166 **Shippers of Gold, Copper, etc.**—A **Welsh** firm, who are buyers of metals and ores, ask to be placed in touch with Canadian shippers of gold, copper, silver and lead ores, concentrates and residues.

167 **Skewers.**—A **London** firm asks for samples and c.i.f. prices London, of hickory and maple skewers in 100-barrel lots, from Canadian manufacturers.

168 **Split Legging Leather.**—A **London** firm asks for samples and prices of split legging leather from Canadian manufacturers.

169 **Spruce.**—**Yorkshire** firm invites prices per standard of St. John or Quebec spruce (St. John preferred), suitable for the manufacture of chip baskets for the fruit trade. The wood should measure from 6 inches to 12 inches broad, 2 inches wide and at random lengths, and should also be of the cleanest description.

170 **St. John's, Newfoundland.**—General merchant enquires for the above products from Canadian exporters. Can give Canadian references. Payments, sight draft.

171 **Roll Newspaper.**—Old-established **London, England,** firm desire to hear from Canadian exporters of this material who can fill orders promptly. Paper for shipment to South Africa. Good business.

172 **Tallow.**—A **Manchester** firm asks for prices of tallow from Canadian exporters.

173 **Timber.**—A large **South African** firm of furniture manufacturers are desirous of getting in communication with Canadian lumber exporters of the following woods: Basswood, oak (plain and quartered), ash, birch, satin-walnut and

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PASSENGER ACCOMMODATION UNEXCELLED.

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THE MOST PICTURESQUE ROUTE IN AMERICA.

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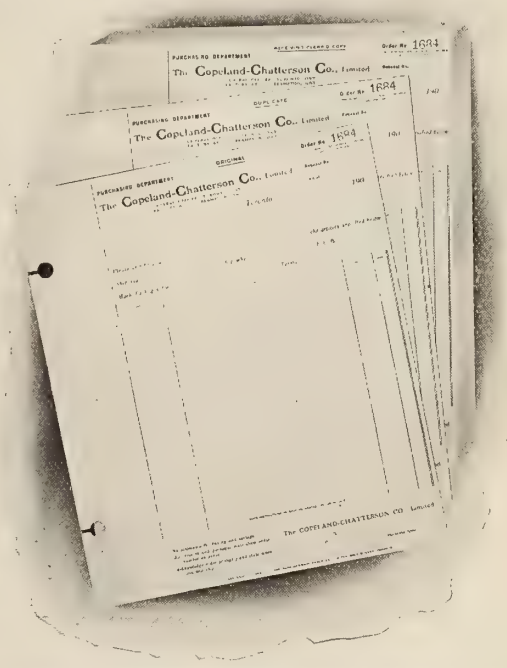
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A Requisition Order System



The Current Binder of the Requisition Order System

THIS new **Requisition Order System** of ours was designed to fill a long-demanded want, and has proved itself equal to the requirements. It not only arranges for and preserves a complete record of any goods ordered, but it also furnishes a check on the receiving clerk, simplifying his work and at the same time forcing him to actually check and record the goods without being aware of the quantity ordered or of the price paid. The expense connected with its installation will be found covered in the minimum time of operation. The old method of furnishing clerks with invoices from which to check off the arriving goods is a bad arrangement, loaded with the possibility of errors occurring, besides furnishing the clerk with information concerning your business dealings, which is not necessary to his particular position. The receiving clerk, by our system, furnishes an actual record of the goods received, which is filed in the office after being compared with the invoice received there. The duplicate copy of the original order, which shows the quantity ordered and the prices, is also compared with the invoice, and remains a splendidly convenient reference in case of a second order. All orders, whether given to a visiting salesman or sent by mail, are of uniform size, either 11 x 9 or 6½ x 9½. The copy retained in the office of the purchasing agent (we are particularly writing of the Triplicate System) is to be filed alphabetically, and the receiving clerk's copy numerically, on binders furnished with the C.-C. System. A Transfer binder is used also in the purchasing agent's office in which to file filled orders. Thus there is always a perpetual separation of filled from unfilled orders, and a direct reference to any particular one, no matter how many orders purchasee is executing at one time. Besides making you absolutely independent of invoices, it discourages substitutions, and the prevalent habit of padding orders is likewise prevented. The fact that the order number is marked on all boxes, barrels, crates etc., makes their identificatiou on arrival a very easy matter. This assists in rapid handling of supplies. The blanks with which the System is conducted are furnished either in duplicate or triplicate, according to the requirements of your business. By an ingenious arrangement of the carbon paper, prices and quantities are not shown on the receiving clerk's copy. **Further particulars and samples will be cheerfully furnished on application.**



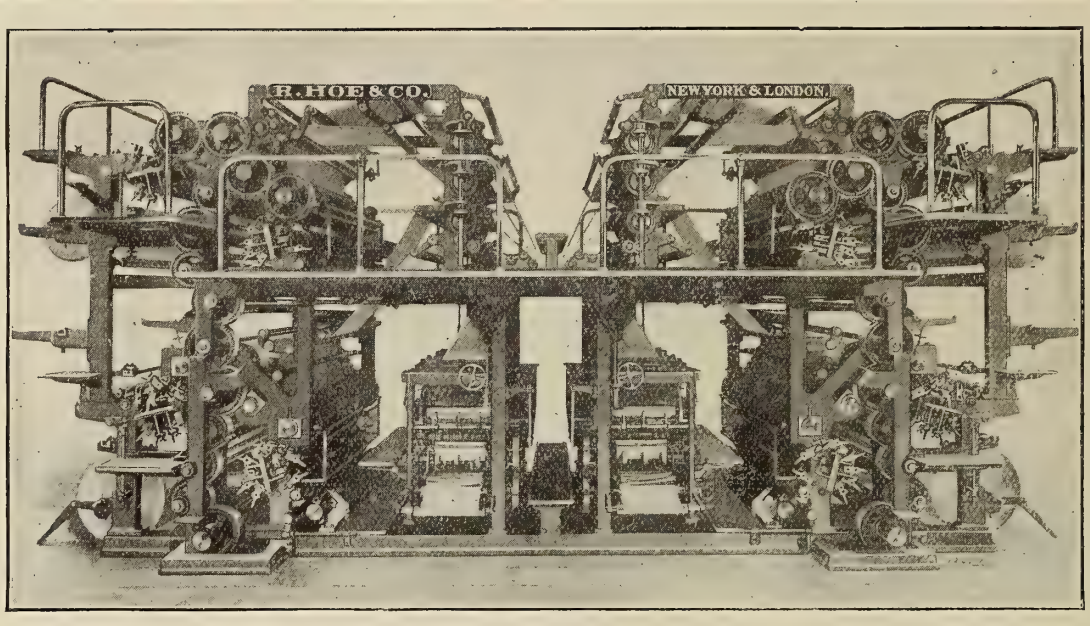
A Block of Purchase Order Blanks, showing the Three Forms which are filled with One Writing

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European Office: 43 Cannon Street, London, E.C. European Factory: Stroud, Glos.

The Mail and Empire.



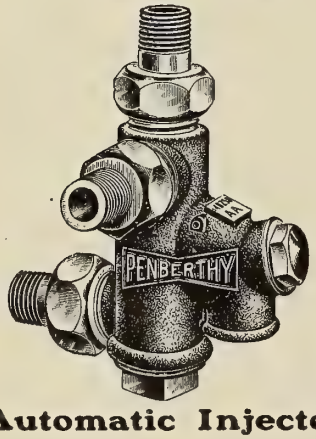
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The largest, fastest and most up-to-date press in the Dominion.

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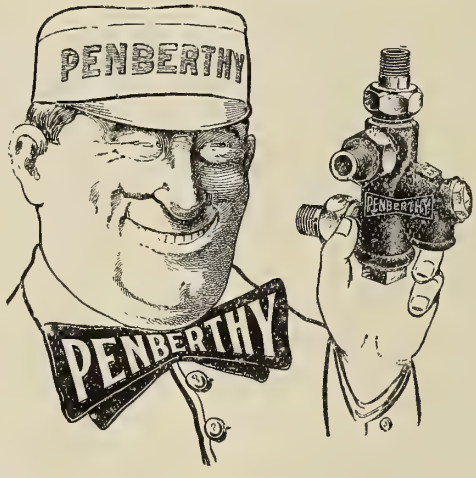
For thirty years The Mail and Empire has fought for the upbuilding of Canada's industries.

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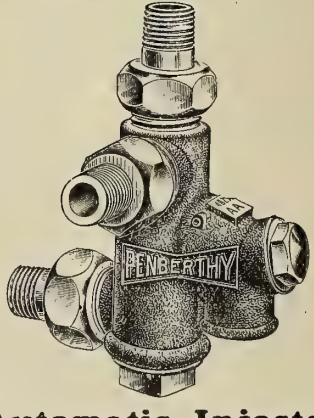
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GENUINE



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PENBERTHY INJECTOR CO., LIMITED

WINDSOR, ONTARIO

black walnut. All drafts, confirmation and shipping instructions will be supplied by Messrs. Cleghorn, Harris & Co., 88 Old Street, London, E.C.

174 **Timber.**—A wholesale firm of timber merchants, contractors and manufacturers of wood goods desire to be placed in communication with Canadian lumber merchants who can supply white spruce wood for box-making, in the following sizes: 3 in. x 6 in., 3 in. x 7 in., 3 in. x 8 in., 3 in. x 9 in., 3 in. x 11in., in lengths from 3 ft to 6 and 7 ft.

175 **Pine Deals.**—A South African timber firm desire to correspond with Canadian exporters of lumber in large quantities, suitable for case-making, also quotations for pine deals in lengths from 4 ft. to 8 ft.

176 **Wire Nails.**—A London firm would be pleased to receive quotations from Canadian manufacturers of wire nails, who can fill orders for shipment to New Zealand.

177 **Wood Floor.**—A London firm, who import considerable quantities of wood floor, has asked to be placed in touch with Canadian manufacturers of this material.

178 **Whisks.**—A Manchester firm requests prices and descriptions of whisks from Canadian manufacturers.

179 **Wood Wheels and parts thereof.**—A Manchester firm asks for prices of wood wheels and parts thereof, from Canadian manufacturers.

180 **Wooden Pill Boxes.**—A London firm seeks supplies of wooden pill boxes (1 11-16 x 1 5-16), and invites quotations from Canadian manufacturers who can fill orders to sample.

181 **Western Canada Representative.**—Well-known traveller with wide connections in the West in the grocery trade would like to hear from manufacturers of grocers' sundries who desire representation in Alberta. References.

182 **Wooden Handles, Brooms, Hay and Manure Forks, Garden Rakes, Picks, Scythes, etc., Clothes-horses and Pins, Horse Hair, Wash-boards, etc.**—One of the best known woodenware wholesale houses of England is in the market to purchase carload lots of the above articles from Canadian exporters. Excellent references. Have been doing business in Canada for twenty years. Will purchase 60 days' draft against documents, or cash for discount. Shipment c.i.f. Bristol. The firm has been established nearly 200 years, and can place large orders.

183 **Tools.**—A Manchester firm invites correspondence from Canadian manufacturers of carpenter and other tools.

TO MANUFACTURERS.

Space To Let in Winnipeg.

Ground floor, 40 x 120 feet. Steam heated. Jackson Engraving Co., 375 Hargrave St., Winnipeg.

Position as Purchasing Agent Wanted.

"Wanted, position as Purchasing Agent or Correspondent for manufacturing firm, by a young man at present employed in a similar capacity by one of the largest manufacturing concerns in Ontario; has had long experience in these lines, thoroughly understands all branches of office work and can furnish best of references. Address Box 10, INDUSTRIAL CANADA.

Western Agencies.

A firm of Commission Agents with headquarters at Winnipeg, having a good connection with the hardware and lumber trade throughout Manitoba, Saskatchewan, and Alberta, desire to negotiate for the Western Agency of Eastern Manufacturers seeking an extension of business in the West. Address enquiries to INDUSTRIAL CANADA, Toronto.



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Just one concern in all Canada makes the ceiling that unites in itself real safety against fire-risk (saves enough in premiums to buy itself quick), real beauty and correctness of design (true to artistic ideals and stamped so the patterns are clear-cut and deep), and real economy in first and last cost (far cheaper than plaster or wood in the long run—indestructible). These are the facts about

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OF THE

International Harvester Co.

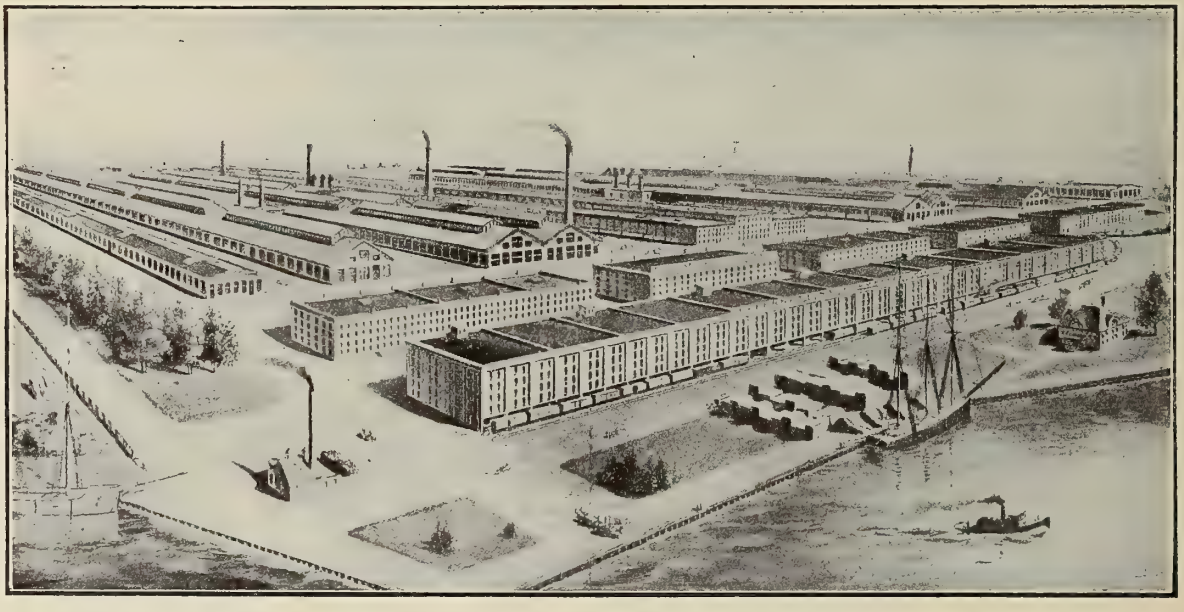
OF CANADA, LIMITED,

HAMILTON, - - ONTARIO

The Canadian works of the International Harvester Company of Canada, Limited, are located at Hamilton, Ontario. The plant occupies one end of a 200-acre tract, and is the largest on British soil devoted exclusively to the manufacture of harvesting machines, seeding machines and tillage implements.

Following are the names and dimensions of the various buildings which comprise the works:—

Grey iron foundry—80 x 740 ft., one story high, with annexes devoted to sand sheds, coke sheds and core room.
Malleable iron foundry—84 x 880 ft., one story high, with finishing department 84 x 80 ft., at one end, three stories high.
Forge shop—84 x 702 ft., one story high.
Erecting and assembling building—72 x 350 ft., two stories and basement.
Knife and bar building—78 x 121 ft., four stories and basement.
Wood shop—450 ft. long, a portion of which is 72 ft. wide and the remainder 100 ft. wide, all one story high.
Paint shop—72 x 178 ft., four stories and basement.
Transformer house—22 x 43 ft., one story high.
Malleable foundry core room—61 x 83 ft., one story high.
Grey iron core room—35 x 150 ft., one story high.
Pumping station and boiler house—41 x 119 ft., one story high.
Storage house—120 x 400 ft., four stories and basement.
Office building—25 x 40 ft., two stories and basement.



All of these buildings are of modern construction and embody the latest and best ideas for fire protection. A full line of both Deering and McCormick harvesting machines, seeding machines, and tillage implements are manufactured at this plant. The list of machines and implements includes the following: Grain binders, mowers, rakes, tedders, disc harrows, smoothing harrows, lever harrows, spring tooth harrows, hoe drills, shoe drills, disc drills, combined cultivators and seeders, and broadcast seeders.

A high standard of excellence is maintained in the manufacture of these machines and implements, and the demand for them throughout the Provinces of Canada and the British possessions is steadily increasing.

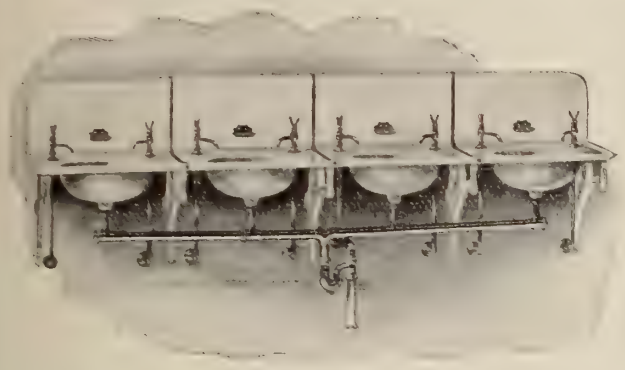
MANUFACTURING PLANT:

International Harvester Company of Canada, Ltd.

HAMILTON, - ONTARIO

BRANCHES:

CALGARY, LONDON, MONTREAL, OTTAWA,
REGINA, ST. JOHN, TORONTO, WINNIPEG.



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High-Class Machinists

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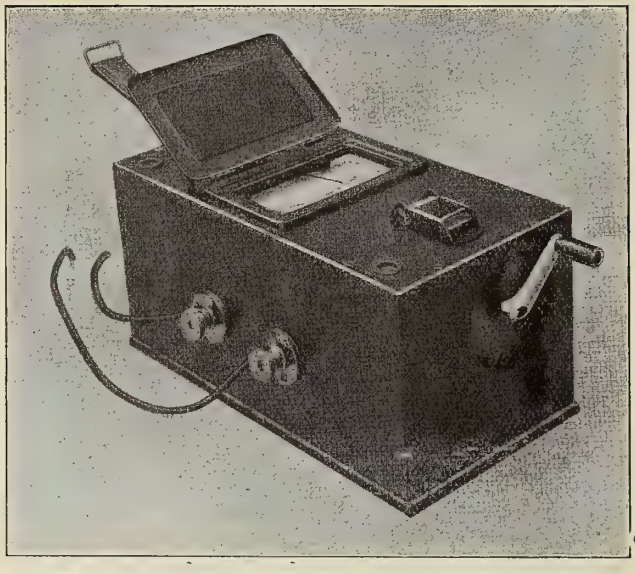
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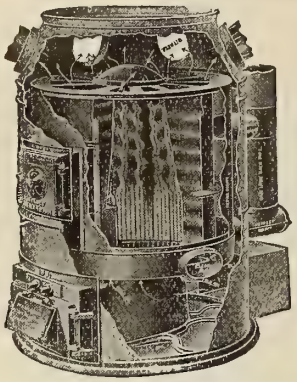
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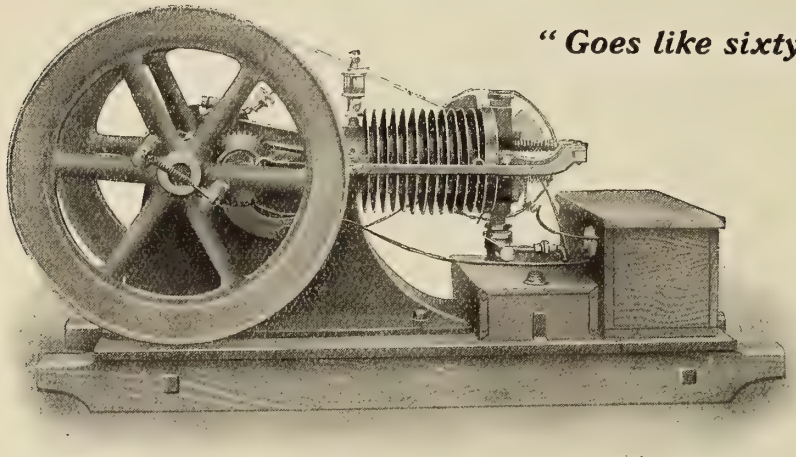


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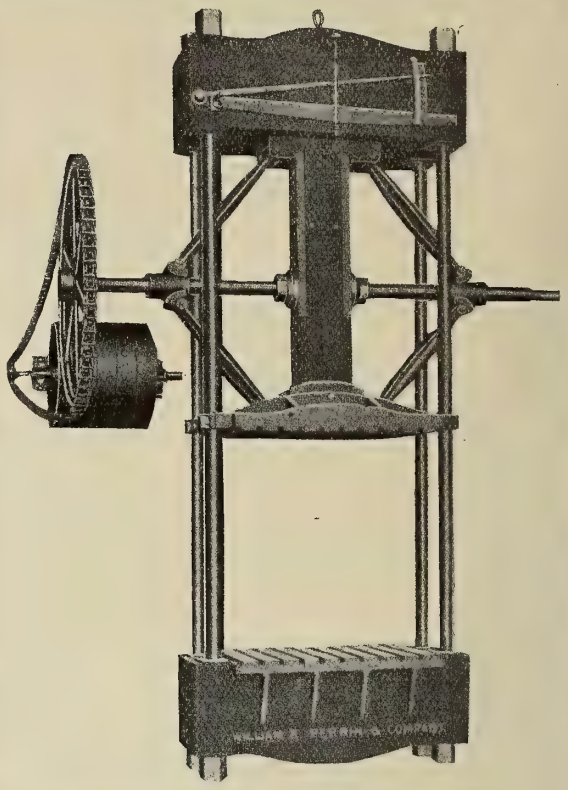
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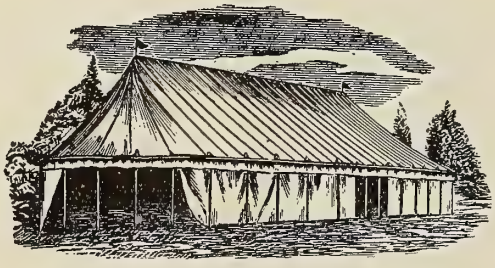
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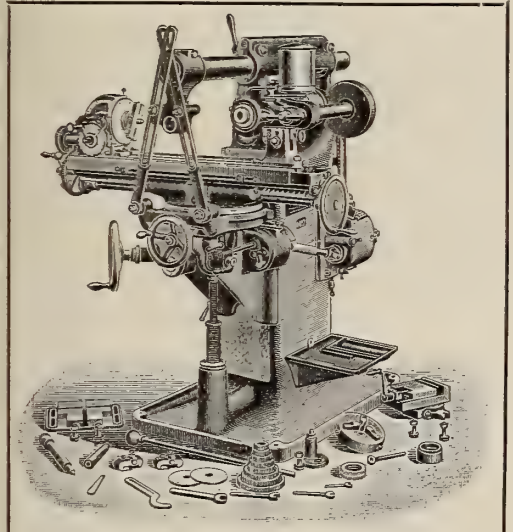
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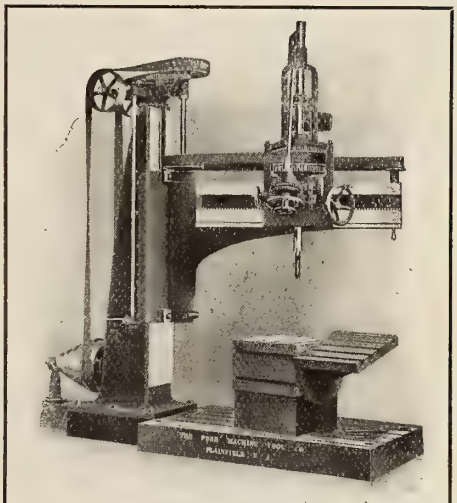
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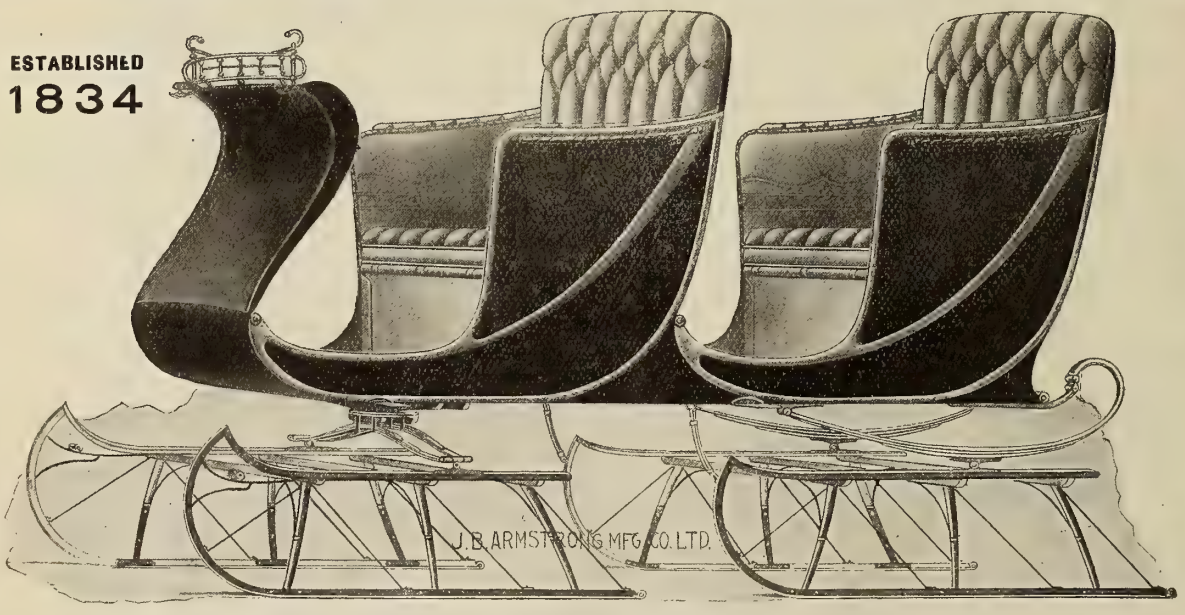
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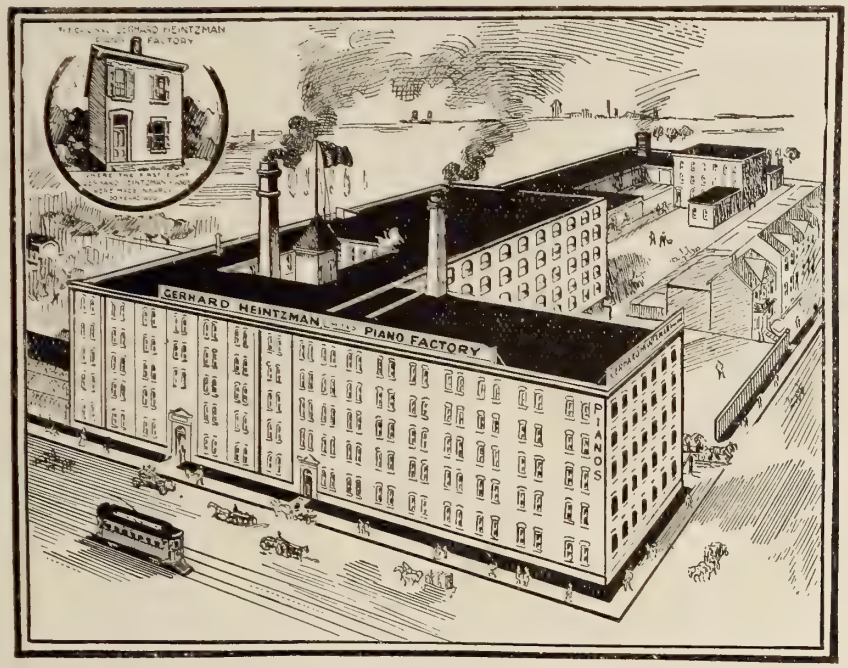
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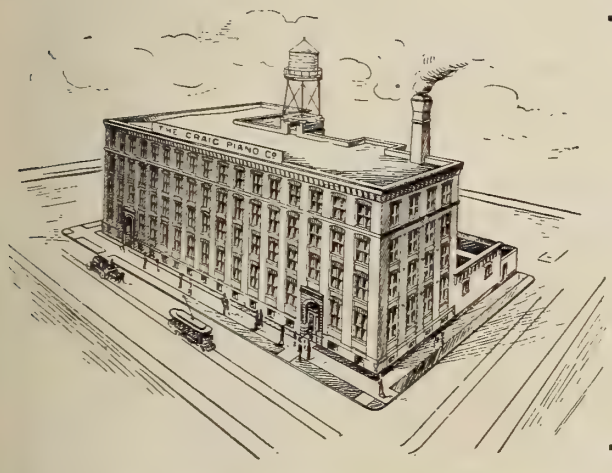
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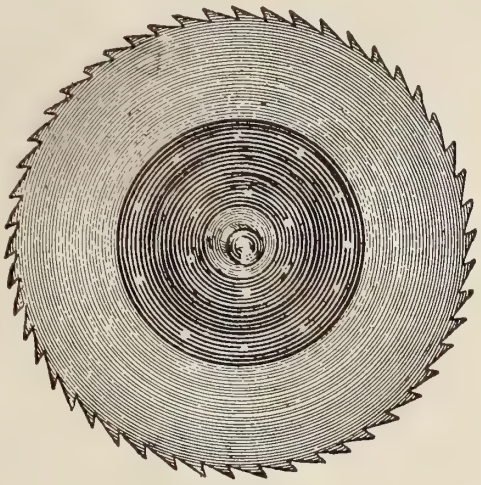
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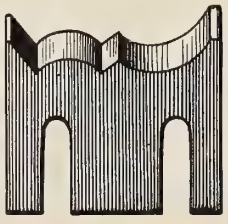
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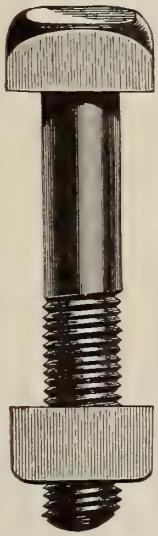
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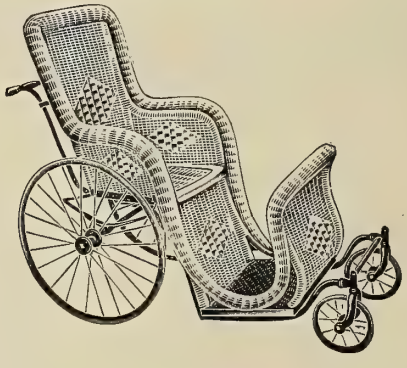
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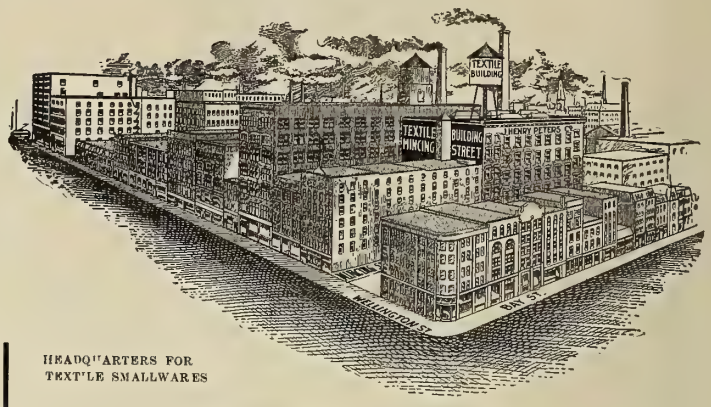
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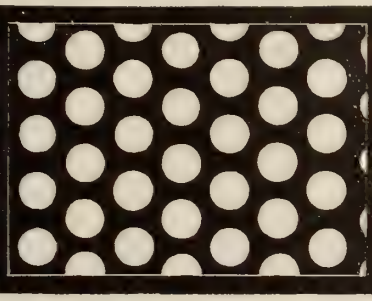
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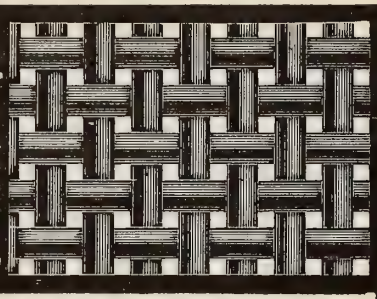
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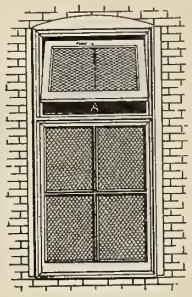
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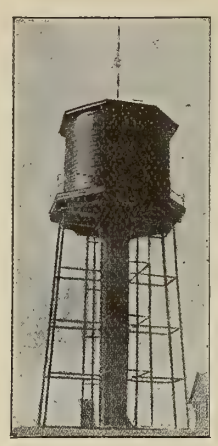
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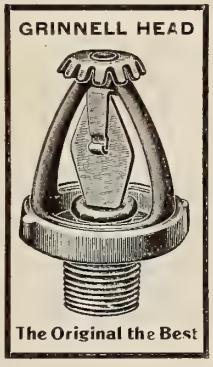
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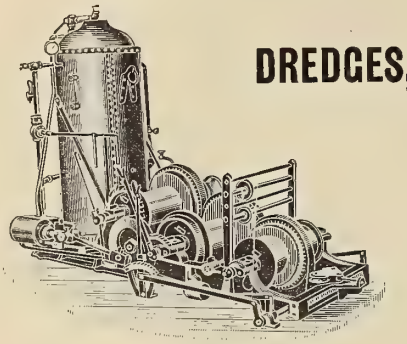
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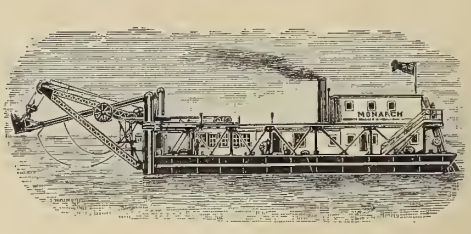
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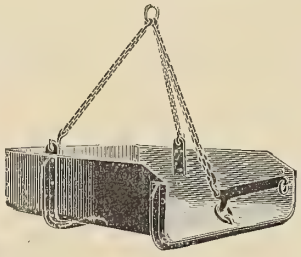


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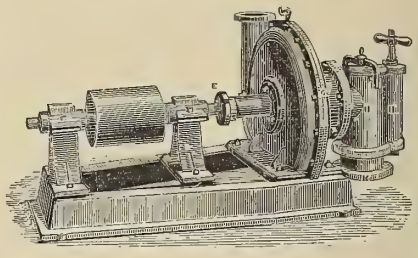
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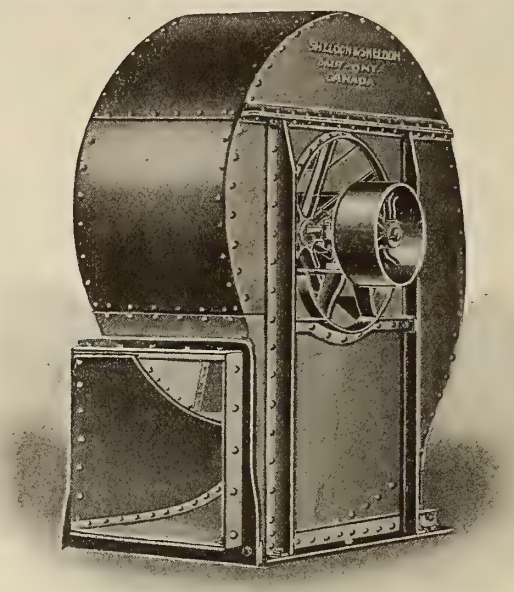
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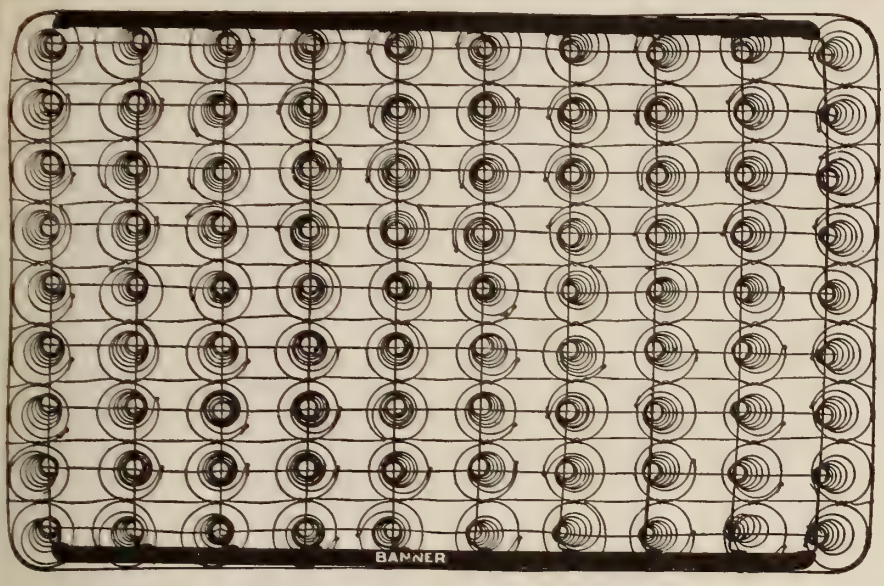
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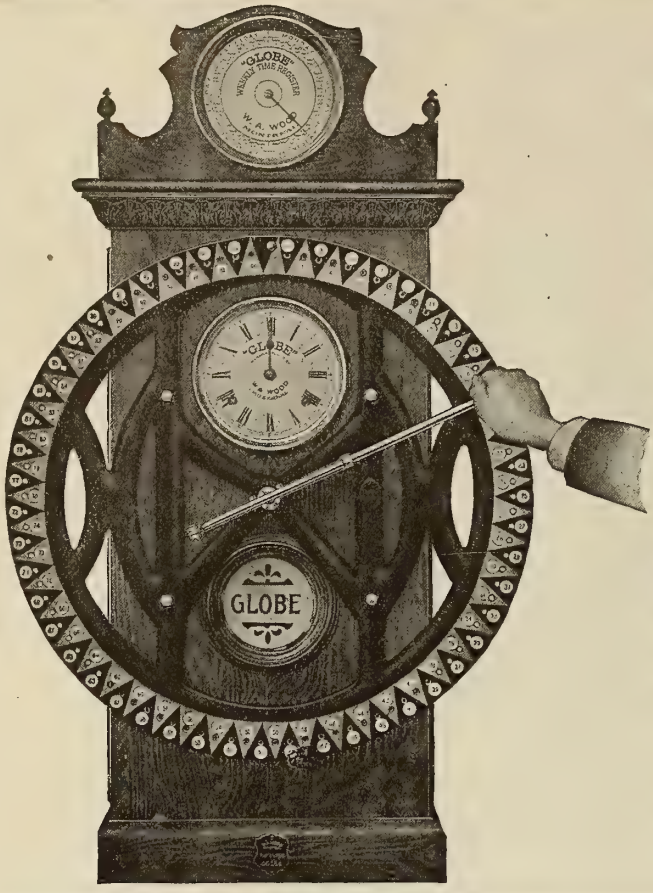
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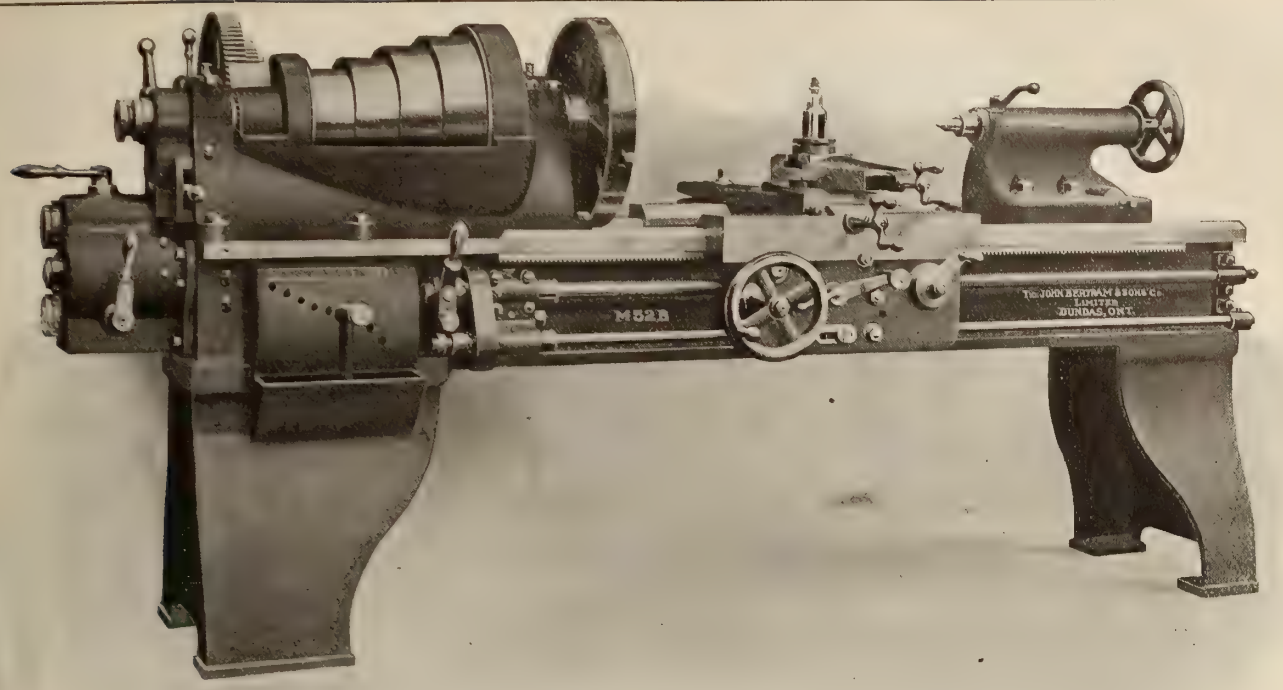
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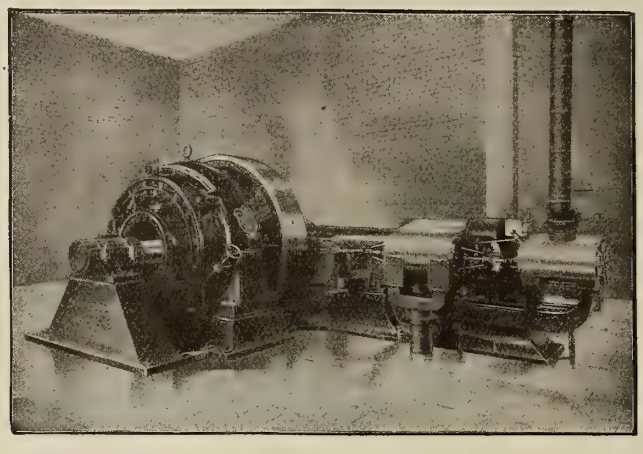
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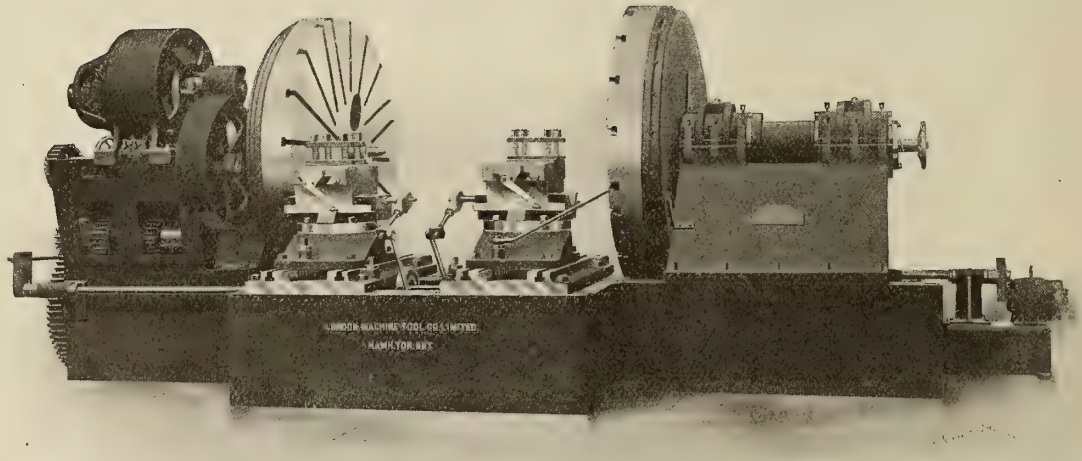
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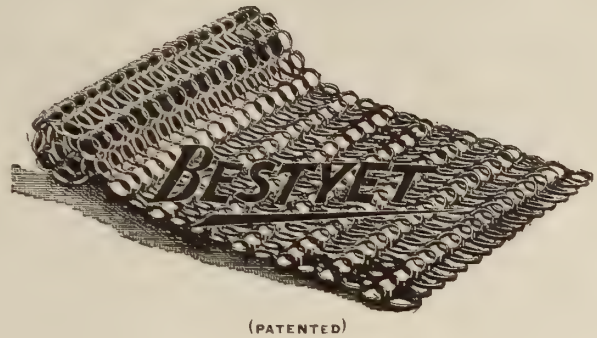
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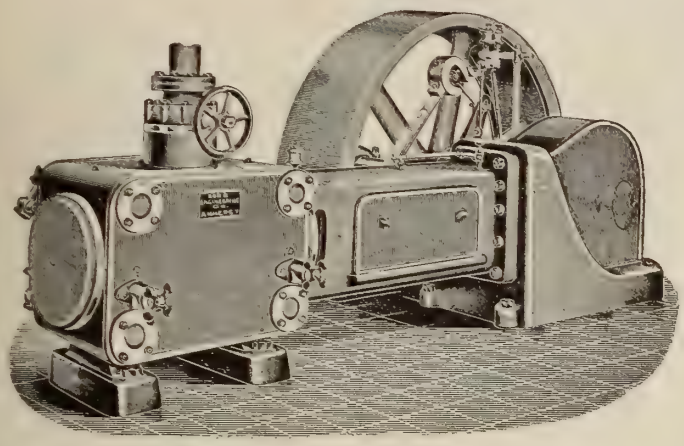
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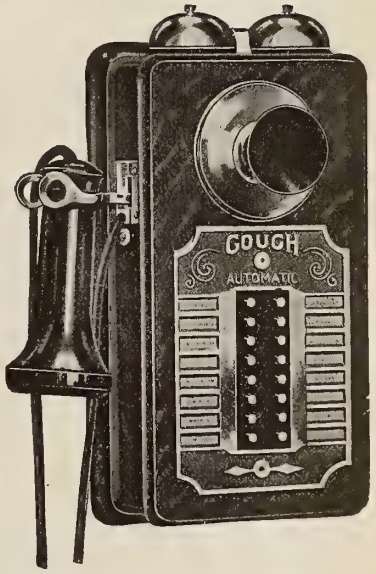
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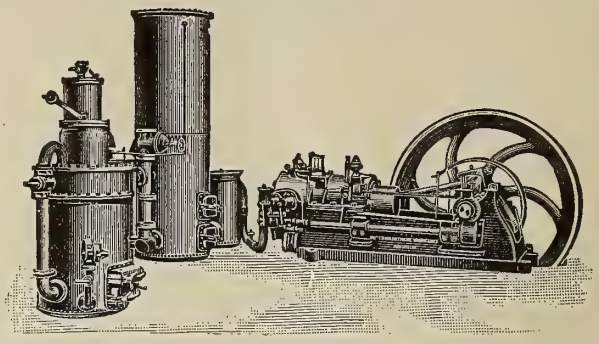
The Editor of THE GLOBE,
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The initiation of a system of wireless telegraphy, by means of which direct communication now takes effect between Europe and North America, is a notable event in the history of the world. The Dominion of Canada has from the outset extended to Chevalier Marconi a most sympathetic support, and I congratulate myself on the privilege of sending this, an opening Marconigram, TO SUCH AN IMPORTANT MEMBER OF THE CANADIAN PRESS AS THE TORONTO GLOBE.

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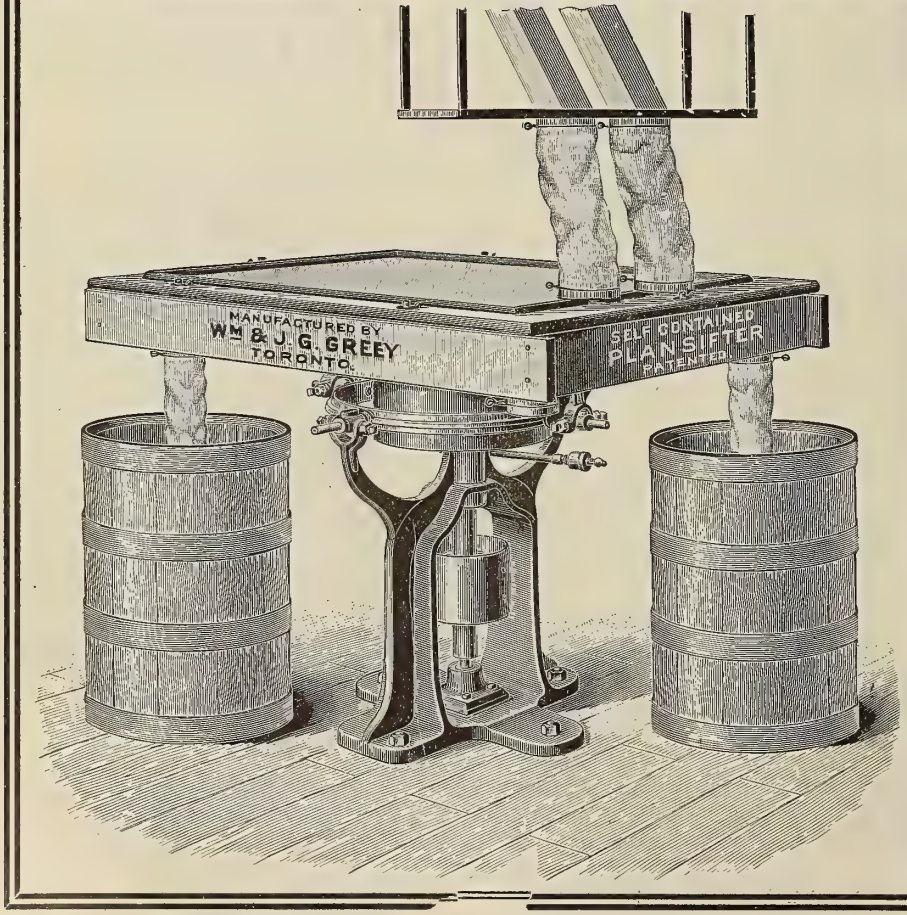
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Vol. VIII. TORONTO, NOVEMBER 1907 No. 4

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

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THE INDUSTRIAL OUTLOOK IN CANADA.

SIX months ago there was no cloud on the horizon of Canada's commercial prosperity. Since that time conditions have developed which have aroused more or less anxiety, and business men in every part of the Dominion are preparing to face what threatens now to be an actual depression in trade. It would be unwise at the present time to predict that Canada is on the verge of "hard times," but it would be even more imprudent to shut our eyes to such significant factors as reduced crop returns and financial stringency, with their attending results already facing us.

The past ten years have brought to the whole world a period of wonderful prosperity, with only temporary setbacks—a prosperity of which Canada has enjoyed her full share. Production has been enormous. Nations have had products to sell, and, to this extent, money also to buy in return. But in the midst of a world-wide prosperity, with plans laid for extension and expansion, the announcement is made of a "short" crop, and is immediately followed by a scarcity of money. The Canadian farmer will probably find that his revenue this year has not decreased, for the small crop has insured him a higher price, but, as a nation, we have less to sell, and consequently will not have the same amount of revenue from foreign sources. This affects us seriously, because we buy a great deal abroad, and we are now brought face to face with the fact that our annual imports exceed our exports by more than $100,000,000.

It does not require any complicated chain of reasoning to understand that the industrial interests most seriously affected by the on-coming conditions in Canada are those of the manufacturer. It is true that up to the present time many factories have not felt any depression outside of the general scarcity of money. It is true that the consumption of manufactured goods in Canada for the coming year will probably equal, if not exceed, the demands of the year just closing. There has been so far no great scarcity of orders; but Canadian factories are bound to suffer before the conditions can be improved.

Why? In the first place, wholesalers and retailers in every part of Canada are reducing their stocks, and are straining every effort to carry only what they can pay for promptly. Having little or no export trade, the Canadian manufacturer depends on the home market, and he finds its purchasing power to-day very much reduced. A reduction in his output naturally increases his cost.

In the second place, the great manufacturing nations, who, through specialized effort and enormous output, have developed a large export trade, will certainly force their goods upon Canada when trade becomes dull and their own markets are overstocked. It is just at this point that tariffs, "evil" though they may be called, become an absolute necessity—particularly for a young country like Canada, which must stem the tide of slaughtered prices from giants such as the United States and Germany. Thus it is that, even though Canada should be blessed with good crops, her general prosperity in times like these depends on the height of her tariff wall, for unless well protected, no industrial nation can escape the effects of a foreign depression. It remains to be seen whether Canada's present tariff is strong enough to defend her working people in their hour of need.

Meantime, it should be the aim of every business house to buy conservatively and pay promptly. This is not the time to overreach, but rather to proceed cautiously and even slowly. There can be no doubt regarding the ultimate success of Canada and her industries. Our progress may be impeded for a little time, and our welfare depends largely on the industrial conditions of other countries. The general tone should be one of confidence, which is merely the natural reflection of our faith in our great resources, our growing population, and our business institutions.

THE TRANSPORTATION OF THE FUTURE.

MR. J. J. HILL, one of the most successful railroad men in the United States, has stated that railroad building is at an end in that country. By that he meant that the era of water transportation has arrived. President Roosevelt has just completed a trip down the Mississippi in company with the Inland Waterways Commission. The object of the trip was to investigate the actual conditions and possibilities for transportation along that route. The people of Chicago are persisting in their efforts to have the big drainage canal, which has reversed the current of the Chicago River and has made a direct water connection between Lake Michigan and the Mississippi, converted into a ship waterway. Their wishes are even now before the International Commission who look after our waterways. It has been stated that wheat can be transported from St. Louis to Liverpool from three to five cents a bushel cheaper *via* the all-water route than by rail and water. At the same time a large sum of money has been expended on improvements to the Erie Canal, it is being strongly urged, and the idea is meeting with general favor, that this canal be deepened so as to be of real service in grain shipments.

All these facts go to illustrate the importance which the people of the United States place upon the question of water transportation. It is, economically speaking, the biggest question they have to solve at the present time. If by improving the Mississippi channel the United States can save four cents a bushel on its Western wheat crop, it will place its farmers in a position of great advantage. Four cents a bushel on three hundred million bushels means twelve million dollars a year. Add to this a proportionate saving on every ton of exports and imports, and the sum becomes colossal.

The difficulties which the United States have had to face will soon be ours. But in the solution of them there is a difference. The United States enjoy no such natural advantages for water traffic as we do. Whereas their great stream runs north and south, ours runs west and east, in the course of commerce. Already the biggest ocean liners ply up to Montreal. In the upper lakes great grain vessels carry huge cargoes till winter sets in.

The problem before us is to find the cheapest route to the sea. The grain of the West cannot be carried by rail. The cost is prohibitive. The Hudson's Bay route has been discussed, but satisfactory proof of its practicability has not yet been adduced. It will have to be proved that the dangers of navigation in the straits are not insurmountable, that the season is of tolerable length, and that a safe harborage in the bay is obtainable.

The present canal system may be improved by deepening to a uniform depth, to permit of the vessels now plying in the Upper Lakes making the voyage to an ocean port without breaking bulk. The merits of this system may be readily estimated. The cost of the necessary improvements may be calculated fairly accurately. The saving in freight charges may also be computed.

Then there are still shorter routes along the line of lakes and rivers in Northern Ontario and Quebec, which would serve as a course for other canal systems. Of these the one that has been most discussed is the route generally known as the Georgian Bay and French River waterway. A few months ago INDUSTRIAL CANADA published an article which went to show that not only was the latter route feasible, but that it would open up a vast field for industrial development. Magnificent water falls, capable of developing unlimited power, would serve as a permanent source of revenue to the Government. It would provide short and cheap transportation for the grain of Western Canada, and would place our Western farmers in an exceptionally favorable position for getting the greatest returns for their crops. In the era of water transportation, this route cannot but play an important part in the solution of our freight problem.

With these bigger problems of water transportation are inextricably bound up the more local ones of harbors and wharfage. Much has been done to improve channels, increase harbor facilities, etc. Taking a broad view of the future importance of our waterways, it will be necessary to carry on this work systematically. The work is national, and it should be done with a view to providing in the end a system of waterways which will work together to the best advantage of the country at large. There is little use in deepening two canals if a third on the same route is left shallow. Nor will it avail anything to make a harbor and not have terminal facilities for handling freight. There must be correlation between the parts. Only so can satisfactory results be attained.

THE LEMIEUX ACT IN OPERATION.

TWO cases which have come up under the Lemieux Act in the past few weeks point the criticism which has been made of that legislation from the first. The measure has been received most sympathetically by employers. It was the general feeling that everything possible should be done to facilitate its operation. And no doubt much good has resulted from it.

The essential feature of the Act, the section which makes it valuable, is that which says that there shall be no strike or lock-out during the progress of an investigation. The theory is that if the questions at issue are gone into by a small body of fair-minded men and the fairness or unfairness of the demands of employer or employee are made public, the party in the wrong will yield in the face of public opinion. It is easier to settle a question where no actual rupture has taken place, as in the case of a strike or lock-out, than later. Hence the Act provides for an investigating board and it provides that during the sittings of that board work shall continue.

But there is the crux of the whole problem. You can compel an employer to continue operating; if he does not you can fine or imprison him. No matter how big the corporation is there is always some one in charge and proceedings can be taken against him. Fines can be piled up and multiplied till he is forced to obey the rulings of the court. How can you compel five hundred or a thousand men to continue work if they do not want to? Or if you succeeded in compelling them to return to work how could you compel them to work, to do a day's work in a day's time?

Coal mining is distinctly a public utility. The whole people in their private and industrial capacities are dependent upon it. A dispute arose recently between the Hillcrest Coal and Coke Company and its workmen, and the manager told the men not to come back until the dispute was settled. A complaint was laid and a justice of the peace fined the manager $200.00. In effect he compelled the company to submit to the provisions of the Lemieux Act, for if a fine of $200.00 will not accomplish the purpose, the amount will be increased. That is one side of the shield. The other reveals a strike in the Springhill collieries, lasting for weeks, without any effective application of the provisions of the Lemieux Act. The Commission sat, the officials of the Dominion Labor Department used all possible means of persuasion, conciliation and diplomacy. But they could not compel several hundred miners to go to work. Much less could they have compelled them to do honest work if they had reported for duty.

That in a nutshell is the weakness of the Act. It is compulsory on one side; it is not on the other. The workmen will be satisfied so long as the decisions are in their favor.

The same thing has been found in other countries, where arbitration is in force. So long as the employees have been adjudged in the right they have been satisfied and have acclaimed the labor conditions as ideal. As soon as decisions begin to go against them, for employers are not always in the wrong, they at once rebel. To be successful, arbitration must be made capable of enforcement by adequate penalties.

The two aspects of the working of the Lemieux Act just recorded are not such as to win favor for the measure. The general public will not approve of legislation which only works in a one-sided way. The object of the act was to give force to public opinion. By that public opinion the Act will be condemned if we have further occurrences like the Springhill fiasco.

A GROWING SENSE OF RESPONSIBILITY.

AN encouraging tendency of the present day is the quickening of public interest in questions affecting the preservation of the natural wealth of this continent. Such considerations are not surprising in the older countries of Europe, for there the land has been long since denuded of its virgin resources, and a renewal of that wealth is only possible through extensive measures of conservation. On this continent up to within a few years ago, the great natural resources were generally considered to be inexhaustible, and they were treated in this spirit. Lakes and streams and the deep seas were pillaged of fish without regard to season; coal and other fuel areas were recklessly exploited; the forests were cut with extravagant prodigality. For years so vast was the supply in every department that future necessities were made subservient to present profit.

A sense of responsibility has come. Leaders have arisen who have challenged the right and questioned the expediency of the present generation reaping without sowing for a second crop. The general public are slow to appreciate that the fisheries are being depleted or that the land is becoming less fruitful. It is satisfactory to know that such leaders are at hand to direct public opinion. The proper development and conservation of our natural resources are subjects of pre-eminent national importance.

Many fields are open for Government activity along these lines. The fisheries which once flourished on the Atlantic coast have been going backward instead of forward. Hatcheries have been established for keeping up the supply of spawn. This policy must be continued and enlarged. There is nothing scientifically or economically impossible about doubling or trebling the supply of fish in the Atlantic coast waters. In connection with this the statement was recently made that the fisheries under proper care could be made to contribute as much to the wealth of Canada as her wheat lands. Both in the Maritime Provinces and in the Lake districts attention has of late been called to the situation. A critical public spirit will do much to bring about a better condition.

Then in forestry, on both sides of the international line, there is going up a demand for a policy that will perpetuate the forests, which in themselves will preserve the sources of streams, with all that that means to the agricultural and industrial welfare of the country. Prof. B. E. Fernow's able address at the recent meeting of the Canadian Manufacturers' Association sounded a warning note, but at the same time suggested a remedy. Upon him himself, as head of the Department of Forestry in the Provincial University of Ontario, will devolve in no small measure the work of preparing men to carry out the work he outlined. Canada's forest wealth is immense. Under a strong and consistent policy our present revenue from it may be kept up and increased without adversely affecting the industry in the future. By limiting the cutting to trees of mature size, by a proper scheme of replanting, by avoiding losses through forest fires, the national heritage may be preserved from generation to generation.

Watercourses, too, are coming in for attention, and a measurement of the flow of water will be made in both Quebec and Ontario. This source of power has only been fully appreciated within the past few years, but it bids fair to revolutionize industry. In the future every flowing stream will be a centre of industrial life, and the prosperity of a country may be measured by its waterfalls.

These are some of the problems which are pressing for solution. They indicate that the age of prodigal exploitation is past and that we are on the threshold of an era of which conservation and scientific development will be the key-notes. With us as with the United States the great question is, Shall we continue the waste and destruction of our natural resources, or shall we conserve them?

EDUCATIONAL FADS AND FRILLS.

THAT there is a tendency abroad to load our school curriculum up with fads and frills is a statement frequently made. This statement is extremely difficult of proof, however, because those in charge of our educational policy hold varying views as to what constitutes a fad. No doubt there is great difficulty in discriminating between the foods and fads in education, just as there is in cereals, but from investigations recently carried on by the Technical Education Committee, it would appear that in Toronto, at any rate, some of the special subjects, or parts of the teaching system, if they are not fads, may at least prove detrimental to the acquisition by the pupils in our primary schools of a thorough grounding in the rudimentary subjects, such as writing, reading, arithmetic, composition and spelling.

In Toronto, particularly, in the past few years, complaints that pupils coming from the public schools cannot write, spell or compose properly have been all too common. Such complaints, coming from manufacturers and business men engaged in diversified branches of industry strike at the fundamentals of our educational system. They are made in most cases by sane, conservative business men who have been successful in their respective careers, and as such merit the serious consideration of the heads of our educational system, and of all voters, for after all it is the citizen's duty to see that the education of his children is carried out on the lines he favors. If his children receive poor mental nourishment it is his business to see that their diet is changed.

From a recent conversation with a gentleman high up in the educational councils of one of our largest cities, it would appear that there is some ground for the statements that special subjects cut in on the time devoted to the essentials. There is a tendency for special supervisors in such subjects as domestic science, drawing, typewriting and singing to magnify the importance of their work, with the result that they encroach on the time that should be devoted to reading, writing, arithmetic, spelling, etc. This is a tendency which the Inspectors are constantly called on to check, and the very fact that it exists gives cause for the complaints of those who cry out against the "frills."

The wretched handwriting of public school pupils is most widely commented on, and speaking of this complaint the same gentleman admitted there was some ground for criticism. He attributed the deficiencies in this respect to the introduction some years ago of the vertical system of handwriting. This is now abolished and an improvement is looked for in handwriting in the next decade. Here we have an admission from a man who knows that a system that was regarded as a fad by many during its vogue, has resulted in sending

forth pupils from the public schools poorly equipped for industrial life, in respect to writing.

Nor is this the only case of the kind. On good authority we learn that the far-famed "phonic" system of teaching reading is, in a measure, responsible for the atrocious spelling of public school pupils. It must be admitted, however, that the phonic system has resulted in an improvement in reading, according to those in charge of our educational system. But surely a system which makes one branch of study and mars another is capable of improvement. If there is room for improvements in such essentials as writing and spelling we must have it at all costs.

The authority quoted above agrees that thoroughness and simplicity are the chief considerations in a public school system, and that the tendency to increase the specials, "the frills," as they are commonly called, has to be guarded against. Coming from one who is in close touch with our school system, these remarks are worthy of the serious consideration of those in charge of our educational policy.

Progress must be secured without imperilling the consistent pursuit of primary principles. The pupil's development should be along a definite line. We cannot achieve the best results if we have vertical writing for ten years, followed by the moderate slant system. The same applies to spelling, composition and the other rudiments of a sound, practical education.

Let the aim of our educationists be a return to a rational system of instruction; a thorough drilling in fundamentals, a simple diet for the mental appetite, and one which is not vacillating from year to year. Two and two still make four, and Latin and Greek roots are still the foundation of good spelling and a good English vocabulary. It is time enough for the new system when the pupil has reached a more mature age and enters the High School.

Make the guiding principles of our public school system thoroughness, simplicity, and stability, and see whether we have not in ten years time better spellers and writers. Give our public school pupils foods, not fads.

MUTUAL INSURANCE COMPANIES IN OPERATION.

WITH the licensing of the two Manufacturers' Mutual Fire Insurance Companies, fire insurance in Canada has entered upon a new stage. The work of organizing companies to handle manufacturers' risks exclusively was not taken up by the Insurance Committee of the Canadian Manufacturers' Association without due consideration. Conditions were thoroughly investigated and relief from existing exorbitant and unwarrantable charges was sought from the companies then doing business in Canada. The comparative isolation of manufacturers' buildings, the provision made against fire, the large profits being earned by most of the companies doing business here, were all urged as reasons for a reducton in rates upon this class of risks. After a campaign of education and an appeal to reason extending over a period of two or three years, to which the companies showed themselves not only unsympathetic but actually hostile, the Insurance Department evolved the idea of establishing a mutual protection against fire losses.

The work undertaken thus after long and careful consideration was no light matter. It involved the working out of a complete system of insurance. Members of the Association had to be visited and the plan explained to them. It speaks volumes for the thoroughness of the preliminary work and the Committee's grasp of the situation, that the need of relief from existing conditions was so universally recognized, and that the means of obtaining that relief through the measures suggested by the Committee were so generally accepted as the best possible solution of the problem.

The companies are now in operation. It will be most interesting to watch their effect on the general insurance situation. Already the tariff companies are assuming a somewhat less arrogant tone. This is assured: if the mutual companies now doing business succeed in giving insurance at less than what it has heretofore cost, there will be a speedy reduction in the rates on this class of business. If the present mutual companies cannot handle all the business offering, and the tariff companies do not give a satisfactory service, other mutual companies will be formed quickly to supplement those already in existence.

In consistently refusing to differentiate adequately between manufacturers' risks, which are isolated, and risks which are subject to a conflagration hazard, the tariff companies have forced the present issue. They should have recognized that a business man who is accustomed to look into the cost of what he buys would sooner or later cast an inquiring eye on the two statements, first, that the New England Mutuals were granting a rate as low as six cents on the hundred dollars, and, secondly, that stock companies doing business in Canada were paying dividends on their capital investment of as high as eighty-nine per cent. per annum. In those two facts would be found the reason of his own high rate. That is what happened. The Manufacturers' Mutual Fire Insurance Companies are the result of a general feeling that insurance could be had at a less cost than has been heretofore exacted.

A PREMIUM ON AGITATION.

SINCE his election to office Mr Whitney has rapidly been gaining for himself the reputation of an upright and fearless statesman who did what he believed to be right and in the interests of the public regardless of consequences. Up to the present this reputation has been so amply justified by his actions that it now comes as more or less of a shock to learn that he is but a politician after all, ever anxious to propitiate the man with the big stick.

By selecting even one of the new factory inspectors from the ranks of organized labor, Mr. Whitney proclaims that the satisfactory performance of the duties attaching to these inspectorships is of less consequence than the placating of that section of the electorate who are supposed to vote at the dictation of labor agitators.

He cannot plead a limited field to choose from, for he was virtually inundated with applications,—nearly 160, all told. He cannot plead ignorance of the real importance of the issue at stake, for the views of the manufacturers were laid before him and his colleagues both frequently and forcibly. He was made fully aware of the perverted uses to which the office of factory inspector can be and has been put by union fanatics to harass employers in the management of their business. He was also made fully aware of the fact that the Union exacts from its initiates an oath that their allegiance to the organization and the individual members thereof shall at all times take precedence over their allegiance to their King and their God.

And yet Mr. Whitney is bold enough to say not only that he considers a union agitator a fit and proper person to come into our factories and tell us how we shall run our business, but he even goes so far as to say that such a man is the best available for the purpose.

By this very act Mr. Whitney places the seal of Government approval on the tactics of those jawsmiths who make their living by fomenting trouble between employers and their work-people. He encourages them to keep it up by the offer of plums to those who create the biggest stir. Why does he not make Roadhouse Chairman of the Board of Examiners for Stationary Engineers and complete the fiasco?

Comment of the Month

Need of Expansion in the Wood Working Industry.

The attention of capitalists, promoters, and manufacturers already engaged in the wood working industry, is directed to the following extract from a letter recently received at this office from Mr. Harrison Watson, the Canadian agent in London, England. Speaking of the need for expansion in this industry, Mr. Watson writes:

"It is rather curious that, considering the great natural facilities which Canada possesses for the production of so many lines of manufactures of wood, and in view of the great demand existing in almost all countries for such goods, there is not larger development in the Dominion in this industry. Indeed, it is doubtful whether, outside of grain and produce lines, there is any branch in which such a favorable opening exists for Canadian goods.

"I have repeatedly called attention to this matter in former Annual Reports, and was again struck by the anomaly when recently looking through the Industrial Census Returns, which showed that hardly any single industry in Canada had developed less than the wood working establishments. This industry would seem to offer a profitable opening for the investment of additional capital.

"Almost daily we receive enquiries from firms here seeking manufactures of wood of some kind, and when we place them in touch with Canadian manufacturers the result is almost invariably that these latter are full of orders and cannot undertake fresh business."

The statement regarding the number of enquiries for wood products is amply proven by the records at the office. During the last year every English mail has brought to the office an average of four export enquiries for such articles as wooden handles of every description, turned goods, such as dowels, ornaments, etc., timber of all kinds, flooring, excelsior, etc. In the majority of cases Canadian firms notified have replied stating their inability to fill export orders, as they had all they could do to keep pace with a growing home business. In some cases, it is true, the prices offered by foreigners for the goods are not high enough to attract Canadian shippers, and there is no doubt that the English buyer must be prepared to pay more if he hopes to purchase in Canada. Still the facts go to show that there is considerable room for expansion in this important Canadian industry, and we have no hesitation in recommending this as a profitable field for those seeking to invest capital.

Exporters Criticised.

With painful regularity criticisms are heard of unsatisfactory export methods of Canadian manufacturers. The unfortunate feature of these is that the harm is not felt alone by the one who offends, but it exercises an evil influence on those who are making every effort to work up an export trade. When a foreign importer gets no reply, or at best an unsatisfactory reply to enquiries, two or three times in succession, he with some considerable reason assumes that such treatment is a national failing. In this way all Canadians are being injured in business reputation by those who do not want an export trade, and who do not take the trouble of replying to letters of enquiry. The following is an extract from a letter of Mr. D. H. Ross, to the Canadian Department of Trade and Commerce. It deals with the question from the Australian standpoint:

The Situation Discussed.

"As a result of several recent interviews with Melbourne importers of Canadian goods, I regret to report just grounds for the revival of the old complaint that manufacturers and exporters in the Dominion—some in a large way of business—are not extending due consideration to correspondence and orders received from distant Australia. One importer contrasted the replies received from United States and Canadian manufacturers when approached for information as to the lines they have to export. The former almost invariably sends catalogues and export (f.o.b) prices of the goods he has to sell, whilst the Canadian frequently asks for further particulars of the inquirer's wants. This latter course is not appreciated for the following reasons:

"(*a*) It is well known that both United States and Canadian manufacturers look upon export trade as an outlet for their surplus production of lines for which they already have a home market. If other sizes or descriptions are asked for, either high prices are demanded, or such a minimum quantity stipulated that business is frequently impracticable.

"(*b*) The delay in obtaining definite information on which orders could be placed. Frequently a firm desires information in order to make up indent for seasonable goods, and writes say nine months before the goods are wanted here. The reply asking for further particulars reaches him in say three months, and another two or three months must elapse before the second reply with prices reaches Australia. Thus only four months are left for the ordering, manufacturing and delivery here, which would rarely suffice to bring the goods in time for the season.

Slow Deliveries of Canadian Goods.

"The very slow delivery of orders placed with Canadian manufacturers is operating seriously against the development of trade with Australia. I am aware of orders having been sent from Melbourne to Canada in June, 1906, and no advices have yet been received that the goods are shipped. There are numbers of instances of indents accepted by manufacturers 9 to 10 months ago that were not, at latest advices, executed. Australian buyers may be obliged to accept delivery when the goods arrive, but they decline to send repeat orders on account of the uncertainty of delivery.

Cancellation of Indents for Canadian Goods.

"Several instances have been brought under my notice of Canadian manufacturers repudiating business contracts, obviously on account of an increase in demand and higher rates ruling elsewhere. Upon the basis of their own quotations some manufacturers notified Australian importers of their acceptance of orders, and the buyers, after anticipating the arrival of the goods from month to month, simply received a notification that the orders could not be filled at the prices upon which the orders were in the first instance accepted. Such treatment is most reprehensible as it reflects upon the good name of all Canadian exporters, who are endeavoring to secure a larger share of the Australian trade."

A Dry-Dock for Montreal.

At a recent meeting of the Chambre de Commerce of Montreal an urgent request was made to the Dominion Government for a dry-dock. In a general review of the situation, the Committee on Transportation showed that in 1898 the Federal Parliament had passed an appropriation of $750,000 for this purpose. No action, however, was taken, and the dry-dock remains unbuilt. Since that time the tonnage of vessels plying in the St. Lawrence has increased immensely. The need, which was recognized ten years ago, has grown with each year. The lack of a dry-dock has a prejudicial effect on

transportation. Vessels which meet with a mishap are compelled to make their way under temporary repairs to a port on the Atlantic where better facilities are provided. All these facts were set forth in the Committee's report. Already great improvements have been made in the Montreal harbor. It would appear that still greater ones will come in the future.

Traffic Through Our Canals.

The statistics of traffic through Canadian canals for the year 1906, just issued by the Department of Railways and Canals, show a notable expansion in tonnage passing through the great lakes and St. Lawrence canal system during the year. The total number of tons of freight passing up and down was 10,253,185, as compared with 9,371,744 for 1905. From United States ports to Canadian ports the number of tons carried was 3,594,784; from Canadian to United States ports, 861,130 tons, and from United States to United States ports through Canadian canals, 4,584,764 tons. The total tonnage handled up and down has increased by 287 per cent. during the past twenty years. The business westward showed a gain of 346 per cent., while the eastward business grew to the extent of 275 per cent. It is instructive to note that this expansion of business in the canals of Canada is relatively larger than that shown by the Canadian railways during the same period, which handled 254 per cent. more traffic last year than in 1887. This comparatively larger increase in the canal business as compared with railway traffic indicates the value and growing usefulness of the Canadian waterways system.

Will Operate Boats.

No small amount of interest has followed the statement of President Hays, of the Grand Trunk Pacific, that that company might operate steamship lines on the Atlantic and Pacific. While the completion of the road is still in the future, the subject is one which must have early consideration. When the C. P. R. was built, it was speedily discovered that without regular steamship connections a transcontinental business would be impossible. Freight could not be set down at either termini without an absolute assurance that boats would be ready at a certain time to receive it. So the G. T. P., when it is completed, will have as part of its equipment steamship lines either owned outright or in direct alliance with it. The transportation system of Canada is being evolved on big lines.

Employers' Right of Defence.

An interesting decision was handed down by Judge St. Pierre, of Montreal, recently. It established a precedent involving the right of employers to organize for mutual defence against the aggressions of trade unions. The case arose in the first place out of a threat on the part of the plasterers' union that after a certain day the members would not work for less than 40 cents an hour, whereas up to that time they had been receiving 33 1-3 cents. A meeting of employers was held, at which the feeling prevailed that the demand was exorbitant. They accordingly agreed to resist the demand, and in the event of a strike to stand together and refuse to engage men at any advance on the established rate then obtaining in the trade. To offset damages which might be done to the rest by the failure of any firm to live up to the agreement, each member deposited a note for $500 with accredited trustees. The case in court arose over the collection of the amount of a note from a member who failed to stand by the agreement, without giving notice of his withdrawal from the association. Judge St. Pierre held that the agreement was legal. In his judgment he pointed out that the law clearly gave workingmen the right to organize for the improvement of conditions, and held that if they possessed this right it was clear that the right also belonged to the employers of organizing to oppose such demands. The allegation that the agreement was in restraint of trade was met by the fact that the agreement only provided for the doing of a certain thing for a certain length of time, and that it interfered in no way with the operation of the law of supply and demand. If the union created an artificial condition, it could not be termed restraint of trade for the employers to oppose it. Besides, the elements of excessive profits and malice common to conspiracies of this nature were entirely lacking.

To Get a Share of Immigrants.

The Government of New Brunswick have entered upon an active campaign for immigration and manufacturing. The Salvation Army will be utilized to bring out settlers. Two officials will be appointed to direct operations, and it is expected that the coming year will see a large influx of settlers into the Province by the sea. The Government feel that the custom of not landing passengers till Quebec or Montreal was reached has militated against the Maritime Provinces. They have received practically none of the new arrivals. Hereafter the work of filling the agricultural fields with suitable settlers will be vigorously carried on.

At the same time an industrial policy will be adopted and consistently pursued. The Province has experienced the need of more factories, with their accompanying industrial armies of well-paid workmen. The forests, valuable as they are, are not in themselves sufficient to insure continued prosperity. They rather suggest the fine possibilities for all lines of manufactures into which lumber enters to an appreciable extent. The close proximity to coal areas should make many industries possible.

Nor is any further proof needed of the possibilities of that part of Canada as an industrial district than the success of the firms which are already established there, some of which have made their goods known from one end of Canada to the other. New Brunswick is out after factories, and it may fairly be expected that she will get them. Her new citizens will not regret their choice.

Advocate a Fisheries Board.

The Fisheries Committee of the Board of Trade had a conference recently with Hon. W. S. Fielding, urging upon him the desirability of the appointment of a Fisheries Board. Some months ago the Board of Trade adopted resolutions to the effect that a Fisheries' Board should be appointed, along the lines of the Fishery Board of Scotland, to act under the Department of Marine and Fisheries, for the regulation and control of the Canadian Atlantic fisheries. It was urged that as far as the Maritime Provinces are concerned, fishery matters have been allowed to drift along without much attempt to improve the conditions or conserve the various branches of the industry. The conditions of the lobster and other fisheries were outlined, also the existing conditions under which pickled fish are handled. The experiences of Norway, Iceland, Holland and the United States, and the changes made in these countries, were set forth, and it was announced that it was thought desirable to call attention of the Dominion Government to the fact that a policy for encouragement of the fisheries can be worked out to better advantage to all concerned by the appointing of such a Board as suggested, to work in conjunction with the Marine and Fisheries Department in matters affecting the betterment of the conditions of the Atlantic fisheries.

Uniform Bill of Lading

IN the August number reference was made to the progress which was being made in the United States with the Uniform Bill of Lading. A joint committee of shippers and carriers had worked on a bill for nearly two years and had agreed upon its conditions. This committee represented substantially all of the railroads in what is known as Official Classification territory, and sixty-seven shipping associations in that territory. It was reported to the Interstate Commerce Commission with the request that it be prescribed as a uniform bill of lading, to be substituted for the bills of lading now and heretofore in use. The Commission ordered that all common carriers by railroad subject to the Act to regulate commerce, be made parties defendant to this proceeding, which would be heard in Washington on October 15th. The carriers were required to show cause why the proposed form of bill of lading should not be approved and prescribed by the Commission as a just and reasonable regulation and practice to be observed by them on and after January 1, 1908.

The hearing was one of the most important ever held by the Commission from the standpoint of the interests affected.

Strong representation was made for the adoption of the bill submitted for the approval of the Commission.

It was the consensus of opinion of the representatives of the shipping interests outside of Official Classification territory (who were the large majority, and represented interests throughout the United States and Canada), that a recommendation should be made for adoption by the Commission, instead of one which it was proposed to put into effect; of the two distinct bills of lading which would be uniform in character, one to be known as a "straight" bill of lading and the other an "order" bill of lading. An "order" bill of lading, it was explained, is a negotiable instrument upon which money can be loaned, and a "straight" bill of lading is an ordinary receipt which the railroad company gives for a consignment of goods.

One of the most important interests heard was the banking concerns, who pointed out that the crops of the country are moved upon loans to the producers made on bills of lading which are not negotiable, the courts having so held, although the banks still recognize them. The bankers were united in endorsing the simple form of order bill of lading submitted by the shippers.

Objections were made on both sides to the form proposed, in fact to such an extent that it became evident that the only practical solution was to adopt the simple form bill of lading submitted by the shippers and build up from that rather than down to it, as was strongly recommended.

The hearing continued on October 16th. Before adjournment the Commission asked each interest represented to suggest amendments to the bill by November 1st in written briefs.

Whilst some interests questioned the authority of the Commission to prescribe a uniform bill of lading, it was evident that all were united in their desire to have one.

The proposed uniform bill of lading, as submitted by the Committee on Official Classification territory:

The following appears on the face of the Bill of Lading:

Uniform Bill of Lading Conditions (As Agreed Upon By Conference May 24 and 25, 1907).

.....Railroad Company and connecting lines.

Received subject to classification and tariffs in effect on the date of issue of this original bill of lading, at ....., ...1907, from ....., the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said Company agrees to carry to its usual place of delivery at said destination, if on its road, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of the said route to destination, and as to each party at any time interested, in all or any of said property that every service to be performed hereunder shall be subject to all the conditions, whether printed or written, herein contained (see conditions on back hereof), and which are agreed to by the shipper and accepted for himself and his assigns as just and reasonable. In issuing this bill of lading this Company, with respect to the portion of the route beyond its own line, acts only as agent and agrees to transport only over its own line.

Nothing herein contained, however, shall be construed as exempting the initial carrier from the liability, if any, imposed upon it by law for loss, damage or injury not occurring on its own line or its portion of the through route or occurring after said property has been delivered to the next carrier.

Insert "order" clause.
Insert description of articles, etc.

.....Agent.

If the word "order" is written in conection with the name of the party to whose order the property is consigned, the surrender of the original Bill of Lading properly endorsed shall be required before delivery of the property. Inspection will not be permitted on order Bills of Lading unless permission is endorsed on the original Bill of Lading, or given in writing by the shipper.

If the word "order" does not so appear the Bill of Lading is "not negotiable," and said property may be delivered without requiring such surrender.

On the back of the Bill of Lading it is proposed to print the following:

Conditions.

Section 1. The carrier or party in possession of any of the property herein described shall be liable for any loss thereof or damage thereto except as hereinafter provided.

No carrier or party in possession of any of the property herein described shall be liable for any loss thereof or damage thereto or delay caused by the act of God, the public enemy, quarantine, the authority of the law or the act of default of the shipper or owner or for differences in the weights of grain, seed or other commodities caused by natural shrinkage or discrepancies in elevator weights. For loss, damage or delay caused by fire occurring after forty-eight hours (exclusive of legal holidays) after notice of the arrival of the property at destination or at port of export (if intended for export), has been duly sent or given the carrier's liability shall be that of warehouseman only. Except in case of negligence of the carrier or party in possession (and the burden to prove freedom from negligence shall be on the carrier or party in possession), the carrier or party in possession shall not be liable for loss, damage or delay occurring while the property is stopped and held in transit upon request of the shipper, owner or party entitled to make such request; or resulting from a defect in the property or from

riots or strikes. When in accordance with general custom on account of the nature of the property or when at the request of the shipper the property is transported in open cars, the carrier or party in possession (except in case of loss or damage by fire), in which case the liability shall be the same as though the property had been carried in closed cars) shall be liable only for negligence, and the burden to prove freedom from such negligence shall be on the carrier or party in possession.

Section 2. No carrier shall be liable for loss, damage or injury not occurring on its road or its portion of the through route, nor after said property has been delivered to the next carrier except as such liability may be imposed by law, and any carrier shall be entitled to recover from the common carrier, railroad or transportation company on whose line the loss, damage or injury shall have been sustained, the amount of such loss, damage or injury as it may be required to pay to the owner of such property or the holder of this Bill of Lading, provided that it has given notice to such carrier, railroad or transportation company at least fifteen days before the payment of such claim, but no obligation respecting such recovery is hereby assumed by or imposed upon the shipper, owner or consignee.

Section 3. No carrier is bound to transport said property by any particular train or vessel, or in time for any particular market or otherwise than with reasonable dispatch, unless by specific agreement endorsed herein. Every carrier shall have the right in case of physical necessity to forward said property by any railroad or route between the point of shipment and the point of destination; but if such diversion shall be from a rail to a water route the liability of the carrier shall be the same as though the entire carriage were by rail.

The amount of any loss or damage for which any carrier is liable shall be computed on the basis of the value of the property (being the bona fide invoice price, if any, to the consignee, including the freight, if prepaid) at the place and time of shipment under this Bill of Lading unless a lower value has been agreed upon or is determined by the classification or tariff upon which the rate is based, in either of which events such lower value shall be the maximum amount to govern such computation, whether or not such loss or damage occurs from negligence.

Claims for loss, damage or delay, must be made in writing to the carrier at the point of delivery, or at the point of origin, within sixty days after delivery of the property, or in case of failure to make delivery then within sixty days after a reasonable time for delivery has elapsed. Unless claims are so made the carrier shall not be liable.

Any carrier or party liable on account of loss of, or damage to, any of said property, shall have the full benefit of any insurance that may have been effected upon or on account of said property.

Section 4. All property shall be subject to necessary cooperage and baling at owner's cost. Each carrier over whose route cotton is to be transported hereunder shall have the privilege, at its own cost, of compressing the same for greater convenience in handling or forwarding, and shall not be held responsible for deviation or unavoidable delays in procuring such compression. Grain in bulk consigned to a point where there is a railroad, public or licensed elevator, may (unless otherwise expressly noted herein, and then if it is not



MAP 1.—Showing freight rates from Ontario districts to Toronto as they were before the adoption of the New Schedule.

promptly unloaded) be there delivered and placed with other grain of same kind and grade without respect to ownership, and if so delivered shall be subject to a lien for elevator charges in addition to all other charges hereunder.

Section 5. Property not removed by the party entitled to receive it within forty-eight hours (exclusive of legal holidays) after notice of its arrival has been duly sent or given, may be kept in car, depot, or place of delivery of the carrier, or warehouse, subject to a reasonable charge for storage and to carrier's responsibility as warehouseman only, or may be, at the option of the carrier, removed to and stored in a public or licensed warehouse at the cost of the owner and there held at the owner's risk and without liability on the part of the carrier, and subject to a lien for all freight and other lawful charges, including a reasonable charge for storage.

value not specifically rated in the published classifications or tariff, unless a special agreement to do so and a stipulated value of the articles, are endorsed hereon.

Section 7. Every party, whether principal or agent, shipping explosive or dangerous goods, without previous full written disclosure to the carrier of their nature, shall be liable for all loss or damage caused thereby, and such goods may be warehoused at owner's risk and expense, or destroyed without compensation.

Section 8. The shipper, owner or consignee shall pay the freight and all other lawful charges accruing on said property before delivery. If upon inspection, it is ascertained that the articles shipped are not those described in this Bill of Lading the freight charges must be paid upon the articles actually shipped.



MAP 2.—Showing freight rates from Ontario districts to Toronto as they are under the New Schedule. The rates is in cents per hundred pounds.

The carrier may make a reasonable charge for the detention of any vessel or car for the use of tracks after the car has been held forty-eight hours (exclusive of legal holidays) for loading or unloading, and may add such charge to all other charges hereunder and hold such property subject to a lien therefor. Nothing in this section shall be construed as setting aside any local law or rule affecting car service or storage.

Property destined to or taken from a station at which there is no regularly appointed agent shall be entirely at risk of owner when unloaded from cars, or until loaded into cars, and when received from or delivered on private or other sidings, shall be at owner's risk until the cars are attached to, and after they are detached from trains.

Section 6. No carrier will carry, or be liable in any way, for any documents, specie, or for any articles of extraordinary

Section 9. Except in case of diversion from rail to water route, which is provided for in Section 3 hereof, if all or any part of said property is carried by water over any part of said route, such water carriage shall be performed subject to the liabilities, limitations and exemptions provided by statute and to the conditions contained in this Bill of Lading not inconsistent with such statutes or this section and subject also to the condition that no carrier or party in possession shall be liable for any loss or damage resulting from perils of the lakes, sea or other waters; or from explosion, bursting of boilers, breakage of shaft or any latent defect in hull, machinery or appurtenances; or from collision, stranding or other incidents of navigation, or from prolongation of the voyage. And any vessel carrying any or all of the property herein described shall have the liberty to call at intermediate ports; to tow and be towed and assist vessels in dis-

tress and to deviate for the purpose of saving life or property.

The term "water carriage," in this section, shall not be construed as including lighterage across rivers or in lake or other harbors and the liability for such lighterage shall be governed by the other sections of this instrument.

When property is carried under a rate which includes marine insurance, the liability of the water carrier shall cover all risks insured against and shall at least equal the liability hereunder for rail carriage in closed cars.

Section 10. Any alteration, addition or erasure in this Bill of Lading which shall be made without an endorsement thereof hereon, signed by the agent of the carrier issuing this Bill of Lading, shall be without effect, and this Bill of Lading shall be enforceable according to its original tenor.

The two forms of bills of lading proposed by the representatives of the National Industrial Traffic League, and endorsed by shippers generally, as well as the American Bankers Association, are as follows:

ORIGINAL.

.....Railroad Co.

.....Station.....190..

Received from .....
the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), to be transported and delivered, in accordance with the provisions of law, in like good order, to consignee.

(Insert description of articles, weight, rate, route; and car number and initials, if in carload.)

OFFICIAL STAMP.

.....Agent.

ORIGINAL.

Uniform Order Bill of Lading.

.....Railroad Company.

.....Station.....190..

Received from .....the property described below in apparent good condition, except as noted (contents and condition of contents of packages unknown) to be transported and delivered to the order of .....
in accordance with the provisions of law and the terms of this bill of lading.

The property herein described shall not be delivered until this original bill of lading, properly indorsed, has been surrendered and canceled, or, in case of a partial delivery, a statement thereof has been indorsed hereon.

Any stipulation or indorsement on this bill of lading that is not negotiable shall be void and of no effect.

Inspection will be permitted under this bill of lading, unless otherwise indorsed hereon, which indorsement shall be made at the time of issue by the agent, if requested by the shipper. Any alteration, addition, or erasure, fraudulent or otherwise, in this bill of lading, which shall be made without the indorsement thereof hereon, signed by the agent of the carrier issuing this bill of lading, shall be without effect, and this bill of lading shall be enforcible according to its original tenor.

Special Marks.

Consigned to order of .....
Destination .....
Notify .....
At .....

(Insert description of articles, weights, rates, and routes; and car numbers and initials, if in car loads.)

OFFICIAL STAMP.

.....Agent.

It is only necessary to here state that the Canadian Manufacturers' Association have been on record for over a year as favoring the adoption of a simple form of bill of lading similar to the one above.

TRANS-ATLANTIC WIRELESS TELEGRAPHY.

MESSAGES have been succesfully transmitted across the ocean by wireless electricity. The achievement, which two or three generations ago would have earned for the inventor a speedy death by fire on the charge of having uncanny intercourse with the Prince of darkness, passes now as a fit subject for a paragrapher's pen. That is all. The public read it and pass it by as just an item of news. There is an accident or a political meeting recorded in the next column; that is of more interest.

And yet what marvels of science must have been revealed during the past few years when such a discovery, such a strange and wonderful achievement, can pass without causing a nine days' wonder? The passenger on board a vessel in mid-ocean can know what is occurring on either continent as quickly as a man in the next street. The Atlantic, as has been said, has been made a ferry by the latest steamers, which cross almost at the speed of an express train. The sixteen cables which form a strange net work in the unfathomable depths of the ocean have brought the people of America and Europe into close contact. But in these cases there is something tangible which the mind can conjure up as forming the connection. The cable doesn't explain the mysterious action which for convenience sake we call an electric current, but we know that it is by means of it, by means of something material, which we can see and feel, that the communication from continent to continent takes place.

But what of the wizard Marconi's system? There is nothing tangible connecting the Glace Bay station with the coast of England. Nothing that we can picture in our mind as carrying a message. Yet a message written here is delivered across the ocean in as many seconds as it takes to tell it. A few upright poles with wires suspended to the top; batteries; and a telepragher's key; that completes the equipment. The same on the other side, or on board ship.

And now that it is explained by students of electricity, it all seems simple enough. Every school of science has set up its instrument and demonstrated its practicability. The wonder is now, rather, that somebody did not discover it sooner. So we glance over the announcement that the Marconi Company will be ready to receive commercial messages within a week, and if they do not we grow impatient at the delay.

Yet Marconi is one of the few men of this generation. He pursued a scientific truth until its meaning was revealed to him—not its whole meaning, that is yet to come—it may reward his maturer years—but its meaning far beyond that which had been yet even dreamed of. He is a man of initiative, an investigator. He is the truest and best type of scientist, the one who discovers the truths of nature. This is a work which must precede the practical application of science. For its pursuit a large mind is required, an imagination and a zeal for the work.

An enterprise is under way at South Thomaston, Me., which, if it proves successful, will be an epoch-making event. A basin with an area of a little over one square mile is being used for the harnessing of the tides. There is a twelve foot rise in the tide at this point, by which it is intended to compress the air between the upper mechanism or platform and the water. It is expected to develop about 5,000 horse-power, the compressed air to be delivered through pipes anywhere within a radius of twenty miles. The experiment is being closely watched.

Valleyfield—A Canadian Cotton Centre

NO place in Canada can more appropriately claim the title of a factory town than Valleyfield, Que., the home of one of the largest cotton industries in the country. Not that it is a large industrial centre, estimated by the number of establishments within its borders, but because its life so largely centres around the cotton mills and other factories there situated.

The magnificent mills and equipment of the Montreal Cotton Co. are really the hub of the town's activity. There the wages of a great part of the population are earned, and upon the successful carrying on of this immense business depends the food and comfort of many thousands of people.

Delightfully Located.

Valleyfield is at the foot of Lake St. Francis, one of the St. Lawrence River lakes, and 32 miles above Montreal. The situation of Valleyfield at the head of one of the St. Lawrence Rapids, has allowed the extensive development of water power for the town and factories. Few places are more delightfully located, and full advantage of this has been taken to make it a most desirable place to live in. The mills, instead of being buried in the narrow streets of a big city, amongst rows of smoke-begrimed houses, are right on the edge of the lake, with fresh running water passing on all sides. There is no smoke to befoul the atmosphere on account of the extensive use of water and electric power.

The mills themselves remind one more of some ancient castle than a modern industrial establishment, yet this is only the first impression, because on entering the visitor soon realizes that he is in a factory whose equipment is thoroughly up-to-date and progressive. If there is one thing the present management of the Montreal Cotton Co. has been noted for, it is the fine condition in which the whole plant is maintained. Every room is scrupulously clean, well lighted and well ventilated. The surroundings are made beautiful by trimly kept lawns and flower beds. The mill buildings, with one exception, are built of stone, and their lofty towers present from a distance an imposing appearance. They are equipped with the most modern automatic system for extinguishing fires, and may be said to be practically fireproof.

The Montreal Cotton Co. believes that its own welfare is closely allied with the progress of the town, and consequently it is ever ready to undertake anything which will be of benefit to the town and to its employees. The Company has its own Hose and Fire Brigade, and on more than one occasion the town has been saved from bad fires through this means.

Model Houses.

Between two and three hundred houses and cottages are owned by the Company and rented to the employees of the mills. These houses are arranged in long avenues on model plans; they are lighted by electricity and have every modern convenience; they are surrounded by gardens and lawns. Those who desire to own their own home can purchase from the Company well-built houses upon a system of easy monthly payments. Fireproof houses of concrete or of hollow cement blocks are built to order and become desirable investments. The rents of these houses are kept at as low a figure as possible, running from $5.00 per month to $7.00 per month, including electric light. Many of these houses are semi-detached with seven rooms, a cellar and a woodshed, while provision is made for a lawn and flower garden in front, and plenty of land in the rear to raise vegetables. To encourage industry at home, annual prizes are given by the Company for the best kept garden.

Provision for Amusements.

A Club for bowling, skating, curling, lawn tennis and other sports, exists for the use of the employees of the Company, and with this is connected a reading room and large library, whence books can be taken home. The Club is a unique institution. The building and grounds, as well as the equipment, belong to the Company, and are maintained by them. A subscription of 25c. per month from each of the members pays the club-keeper, the heating, and for the purchasing of books for the library, which now contains upwards of 1,000 volumes. Billiards, cards, dominoes, checkers, and chess can be played, while there are splendid lawn tennis courts in summer and skating and curling rinks in winter. The bowling green is lighted at night by electric arc lamps; it is one of the best greens in the country.

The Company's Activities.

A co-operative store after the principle of the Lancashire and Scottish "Co-ops," does a good business, and the Company has established a savings bank, in which the earnings of their workers can be deposited, and upon which they receive interest at 5 per cent. per annum.

The Company also believes in proper food for its servants and runs a farm to supply pure milk to its employees.

Valleyfield has very fine schools, including the Gault Institute, which was built through the generosity of a former President of the Company. This school has already won an enviable reputation in the Province, and is carefully fostered by the Company. Free classes are maintained every night under the auspices of the Council of Arts and Manufacturers, and subsidized by the Government.

Outside of the Montreal Cotton Co. there are a number of other factories, including, especially, the flour mills of McDonald & Robb, and the fine new establishment of the Canadian Bronze Powder Works. All these work together to make Valleyfield an ideal factory town, and it is a typical place to study what can be accomplished by progressive industrial leaders to supply for their workmen the comforts and necessities of life.

CO-OPERATION OF WORKMAN AND EMPLOYER.

The interdependence of capital and labor was recognized in the action of the employees of a Chicago manufacturer recently. During the recent extreme stringency in the money market, when it was impossible for even the soundest of institutions to get advances from the banks, a score of the workmen provided enough funds to carry the manufacturer through two pay days. If more was needed they promised to provide it. The business which was being carried on was profitable. There was no reason for its discontinuance. Yet, as has been the case with a number of other industries, the inability to raise ready money might have necessitated the closing of the factory, and the throwing out of work of many employees. With the assistance thus received the manufacturer can continue his business, his employees will have steady employment, and those who have advanced money not only have the security of a prosperous business for their investment, but they have the additional personal satisfaction of having been active factors in preserving the business through which they earn their living.

Profit-Sharing Fire Insurance.

IN the practical working out of fire insurance business the cost, i.e., the rate paid by the assured, must cover the actual disbursements for losses, expenses, reserve and profit to the shareholders whose money is invested; this is the formula propounded times without number by the representatives of the Stock Fire Insurance Companies, and it has come to be recognized as their established creed.

The losses sustained are, of course, an uncontrollable and variable quantity; the Reserve is determined and defined by Government legislation, and whether the basis is right or wrong it must stand. The expenses and profit are two factors in the cost that the companies have entirely in their own hands, and both items have for many years caused much discussion and distrust amongst the policyholders.

The expenses, as is now well known, on Canadian business, have averaged about thirty per cent. of the premiums, of which considerably more than one-half has been given to agents and brokers by way of commission. The profits! Well the companies and their organs claim none have been made on Canadian business, and for proof appeal to the Government Blue Book since 1869 or some other date in ancient history. The companies and the public will never see eye to eye on this subject, and no good purpose can be served in discussing the abstract question.

Can the actual cost of fire insurance be reduced is the question that has been agitating the public mind for some time. That it can be reduced has been demonstrated by numerous successful Mutual Companies here and in the United States, and it is hoped that the companies organized under the auspices of the Manufacturers' Association, of which more will be said in our next issue, will add further convincing evidence on this point.

A further effort on somewhat different lines, but with the same object in view, is now about to be tried by Messrs. Burnett, Ormsby and Clapp, Limited, of this city, by issuing a policy which offers to the insured a share of the profit made in the working out of the class of business to be written thereunder. Particulars of this special policy will be found in our advertising columns.

Messrs. Burnett, Ormsby and Clapp have struck at the vulnerable point in inserting in the policy a guarantee that the expenses are to be limited to twenty per cent., and we cannot but heartily commend this movement as setting a good example, which might well be followed by those who so clearly have the power to place a limit on the controllable cost of getting the business. A saving of ten per cent. in this item means a reduction in the actual fire cost and corresponding benefit to those who avail themselves of the opportunity of taking insurance under the new (new for Canada, but old and well tried elsewhere) profit sharing policy.

We are interested in the reduction of the fire insurance cost, however it is accomplished, and we shall not only carefully watch the experiment being tried by Messrs. Burnett & Company, but we shall gladly encourage the use of the policy by manufacturers who are seeking a reduction in a direction where it may be reasonably looked for.

AN INTERPRETATION OF POLICY CONDITIONS.

The interpretation of the conditions specified in a Fire Insurance Policy is of interest to all manufacturers. We quote from the report of a recent decision:

> "These two cases arose out of what, if one were to disregard the current euphemisms, would be characterized as an attempt on the part of two fire insurance companies, which, I presume, consider themselves respectable, to defraud the plaintiff by refusing to pay him that part of his loss covered by their policies—and that on pretexts of the most flimsy character. The only thing about the defence that is to be commended is the admirable propriety and skill with which it was conducted in court by Mr. Raney and Mr. Eyre."

The above sentences form the introduction of Mr. Justice Riddell's judgment, issued this morning, in the cases of Thompson *vs.* the Equity Fire Insurance Company, and Thompson *vs.* the Standard Mutual Fire Insurance Company, tried at North Bay and Toronto.

From a Gasoline Stove.

The plaintiff had a furniture and drug store in New Liskeard, in Northern Ontario, and took out a policy of insurance in the Equity Fire Insurance Company on June 12th, 1906, for one year from May 25th, 1906. This policy was on the building, No. 214 Sharpe Street. He also had insured in the Standard Mutual Fire Insurance Company for $1,500, including $1,000 on the stock of drugs and $500 on the fixtures, for twelve months from the 27th of August, 1906.

"Not being a qualified chemist," says the Judge, "and druggist himself, the plaintiff had in his employ in one branch of his business a member of that profession, Post by name. This gentleman was also a tenant of the plaintiff, and occupied the rooms above the store. He had a gasoline stove which he had used a very few times, and then discarded, leaving in it a small quantity of gasoline. On the 4th of September the druggist, desiring to make some 'fruit essences,—so called, I understand, because there is no fruit in them—for the soda fountain, and not having time for the longer process, brought down the discarded gasoline stove and lighted it, leaving it in the back room. In a short time smoke and fire were noticed. This, no doubt, was started from the stove. Every effort was made to extinguish the fire, but owing apparently to a break-down in the fire apparatus of the town, the attempt was unsuccessful."

Honesty is the Best Policy.

"I cannot part with these cases," concluded Mr. Justice Riddell, "without again deprecating the course taken by these companies. While at the bar, I had very considerable practice in insurance cases, and I think I may say that it was the universal custom of all respectable companies not to raise technical defences such as have been raised in these cases, except in cases in which there was well-grounded suspicion of fraud on the part of the insured. Judged even by the low ground of expediency, it was found for insurance companies, as for others, that 'honesty is the best policy.' And I must say it is rather against one's ideas of honesty and fair dealing that a claim such as this, having no suspicious circumstances and nothing to indicate aught but fair dealing, should be contested upon the grounds taken here. The court cannot prevent an insurance company taking advantage of everything law or practice entitles them to, technical or otherwise; but it might be well for insurance companies to consider whether such defences as these are not to some extent responsible for the feeling that notoriously exists in the country against them.

"The defences wholly fail, and there must be judgment for the plaintiffs for the full amount of the policies, with interest from a day sixty days after the receipt of the proofs of loss.

"The defendants will also pay the costs."

In using this extract *in extenso* from the *News*, we wish it understood that we have no desire to draw special attention to Mr. Justice Riddell's severe condemnation of the action of the two defendant companies. The point we desire to emphasize is that honest claimants may be deprived of their honest dues by frivolous objections by the insurance companies, and that "the Court cannot prevent an insurance company taking advantage of everything law or practice entitles them to, technical or otherwise."

It may safely be said that technical defences are the only ones upon which the Insurance Companies stand much chance of succeeding, and in only very rare and exceptional cases need the violation of the assured of a technical condition have rendered such a defence possible. For example, in the present case, the defence is based upon Section 10, Sub-Section "F," of the Ontario Statutory conditions, which reads as follows:

10. The Company is not liable for the losses following, that is to say:

(f) For loss or damage occurring while gasoline burning fluid, benzine, naptha, or any liquid products thereof . . . . is or are stored or kept in the building insured, or containing the property insured, unless permission is given in writing by the Company.

If the policies of insurance had been properly written, the permission provided in the last few words of the clause just quoted would have been secured, and the technical defence of the companies thereby avoided.

Mr. Justice Riddell in his judgment holds that the act of the insured's representative in using a gasoline stove to make some fruit essences did not constitute a violation of the condition in the Ontario Act previously quoted. Well and good. The technical pleading of the companies has, however, resulted in the practical hold-up of the assured from the 4th of September, 1906, during which time he has not only been kept out of his just dues, but even with a "win" to his credit is saddled with costs that cannot be recovered from the losing side.

This case is of much interest to manufacturers, because at some time or other gasoline, benzine, naphtha or some product thereof in larger or smaller quantities is used, kept, or stored by every one of them. If for nothing else than to prevent a technically inclined company using a purely technical defence, as employed in the case under review, all polies of fire insurance covering manufacturing establishments should provide the written permission to keep and use the articles referred to.

This, however, is only one phase of the question, but it enforces the suggestion made in these columns over and over again that the time to see that insurance policies are in order is before rather than after a fire.

JAPAN'S TRADE MARK LAWS.

Much criticism has been heard recently in some quarters as to Japan's inability or unwillingness to protect the trade marks of foreigners. The Japanese stoutly maintain that they do not discriminate against foreigners in the protection of trade marks, and that their system of trade mark and patent legislation is strictly in line with that of many other countries.

The Japanese admit that the recent growth of trade in China proper and Manchuria may have produced some unscrupulous traders who are making dishonest profits by imitating not only foreign but Japanese marks also, but insist that such cases must be exceptional ones; and that if they really happen, the dishonest practice is not restricted to Japanese alone, as stories are often told of foreigners misappropriating Japanese trade marks in central and southern China in connection with earthenware, glassware, etc.

One Japanese journal says: "On our part, it is our opinion that confusion of trade mark rights is a phenomenon natural in newly opened markets, and it is especially difficult to avoid this in the present state of things in China. Japan, however, did not neglect to pay attention to this, and has been and is trying to suppress such illegal practices by establishing in China trade mark rights of all nationalities. For this purpose she has bound China in the additional treaty of commerce and navigation to enact a trade mark law.

"Were such law enacted in China, all foreigners would receive equal protection under one and the same law, and there could be no international difficulties about trade mark law. Japan's intention is honorable. She does not mean in any way to monopolize the Chinese trade, but simply to introduce into that empire an institution which is in force in all civilized countries, and to have the rights and interests of all foreigners respected and protected there. Of this there can be no doubt."

It is said that the first legislation as to trade marks was doomed to postponement for an indefinite time on account of objections from some of the foreign states. Japan listened to the arguments of these states, yielded to them as far as not inconsistent with her interests, and endeavored to bring about an amicable settlement, but in vain.

The spirit of Japanese legislation is to give protection to trade marks of prior use, but most of the marks offered for registration being new, she has adopted a system in which the title is given to the first registrant, instead of the first user, as is the case in some countries. The state of things in Japan led her to adopt the former system, and in adopting this system there is no discrimination against foreigners. Under the treaties of peace and commerce and the convention of the International Union for the Protection of Industrial Property, the subjects and citizens of the treaty powers and any other foreigners residing in Japan are said to receive the same protection as Japanese subjects regarding their trade marks.

If foreigners do not neglect to assume their rights, the Japanese law gives them sufficient protection, and they cannot justly hold the Japanese law responsible for injuries which are only caused by their own negligence. Besides, it is not Japan alone that adopts the "first application" system.

Of the principal commercial states in the world, there are eleven countries (Germany, France, Austria, Spain, Portugal, Denmark, Sweden, Switzerland, Norway, Canada and Brazil) where the same system is in force, against five (Great Britain, the United States the Netherlands, Belgium and the Philippine Islands) where the "prior use" principle is adopted.

To sum up, there is of course the necessity of investigating whether or not there are any unscrupulous Japanese merchants trading in China who appropriate trade marks belonging to others. Suppression of such a dishonest practice is the avowed intention of Japan, and the Japanese say that in the sincerity of her desire to introduce into China a system of protection of industrial property for the sake of civilization and the development of commerce, Japan is next to none.

The Cotton Spinners' Visit

IN welcoming to Toronto, on Saturday, October 19th, the touring members of the International Federation of Master Cotton Spinners' and Manufacturers' Associations, the City and the Toronto Branch of the Canadian Manufacturers' Association welcomed the most important and cosmopolitan body of European manufacturers that every crossed the Atlantic together. There were about one hundred and twenty in the party, of whom one half were British manufacturers, the remainder representing Germany, France, Austria, Italy, Portugal, Belgium, and United States. Six ladies also accompanied the party and enjoyed the entertainment provided by the city and the Toronto Branch. The International Federation, to which the tourists belong, is composed, as its name implies, of all the cotton manufacturers of the world, every civilized country being represented except Canada, and was formed in 1904, at Zurich, to protect the legitimate interests of the cotton industry and thwart the disastrous operations of the cotton speculators. Speaking of these operations, and their results, the President of the Association, Mr. Charles W. Macara, of Manchester, England, said:

"An evil infinitely more prejudicial than the fluctuations in the cotton crop has been the opportunities that have been given to men, who neither grow nor spin cotton, nor are legitimately engaged in its distribution, to bring about ruinous fluctuations in the price of the raw material. The burdens imposed and the disastrous influence of these operations upon all who are legitimately concerned in the progress of the industry, which is second only in importance to agriculture itself, cannot be exaggerated. It has led to the dislocation of business, to the stopping of mills, and to the ruin of many, including not a few of the speculators themselves. To such lengths has the evil extended that the need for a world-wide organization to combat the operations of the speculators was brought home to all Europe four years ago."

It will thus be seen that the organization has a solid foundation and legitimate ends to pursue. An idea of its importance can be gained when it is known that the Association represents 76,000,000 spindles, practically all of the cotton mills of Great Britain and Europe.

The visit to America and Canada, just completed, was organized primarily for the purpose of attending the second International Conference of Cotton Growers and allied interests, held in Atlanta, Georgia, Oct. 7, 8, 9, 1907. Subsequently a tour was arranged through the cotton fields of United States, where time was spent in inspection of the plantations and methods of handling the crop. The tourists then proceeded to St. Louis and Chicago, and thence to Toronto, which was the only Canadian city visited, on October 19th.

The party, which travelled in a special train, was met at St. Thomas by the Secretary of the Toronto Branch, who accompanied them to Toronto. Owing to delays at the Detroit River, and a bad engine on the Michigan Central, the train was over two hours and a half late in arriving at the Union Station. This, however, did not dampen the enthusiasm of the Civic Reception Committee, and the members of the Association who met them on arrival and conducted them to electric tally-hos, in which they were conveyed to the City Hall. The Mayor received the party in the Council Chamber, which was handsomely decorated for the occasion, making a happy speech of welcome, which was replied to for the visitors by their President, Mr. C. W. Macara. Taking the tally-hos again, the party proceeded up University Avenue through the University grounds and Queen's Park, to the Parliament Buildings, where they were received in the Council Chamber by the Premier, Hon. J. P. Whitney, Hon. J. J. Foy, and Hon. Thomas Crawford. After the customary speeches the party proceeded on their drive through the chief residential sections of the city, arriving at McConkey's Restaurant at six o'clock, to partake of the dinner given in their honor by the Toronto Branch.

Over one hundred and fifty sat down at the dinner, which was one of the most successful functions ever given by the Toronto Branch. The Chairman of the local entertainment committee, Mr. J. S. McKinnon, presided over the gathering in admirable fashion, and seated at the head table with him, in addition to local public men, were representatives from nine different nations, including the President of the Association. After the dinner had been done justice to, Mr. McKinnon introduced the toast list in a very happy and clever speech.

Greetings were also given by Mr. E. J. Freyseng, Chairman of the Toronto Branch of the Canadian Manufacturers' Association, Mayor Coatsworth and Hon. J. J. Foy. On behalf of the visitors a happy reply was made by Mr. J. R. Barlow, Manchester, one of the largest manufacturers of cotton goods in England, and brother of Sir Edward Barlow, the King's physician. Mr. Barlow repeated an invitation previously extended to Canadian cotton manufacturers to join the Federation.

Dr. S. Morley Wickett spoke of the resources and economic conditions of Canada. He said there were 1,500,000 spindles in this country, but these could not supply the home market. Mr. J. S. Willison, Editor of the *Toronto News*, spoke of the spirit of toleration in the Dominion. Hon. Thomas Crawford proposed the toast to the guests.

The following spoke for the Europeans, the Frenchmen and Italians conveying their messages by means of their own languages —France, Mr. Daville Motte; Germany, Mr. Erich Fabarius, of Bremen; England, Mr. J. B. Tattersall, of Oldham; Austria, Mr. J. G. Haeble; Italy, Dr. Tullio Fosati, of Milan; Belgium, Mr. M. Buysse; Portugal, Mr. H. P. Tavira. For the United States Mr. G. O. Draper spoke.

An orchestra played during the dinner, which was further enlivened by the singing of three patriotic songs, by Mr. Frank Bemrose, and altogether a very enjoyable evening was spent. The party broke up at nine o'clock, when the guests were conducted around the city in small groups by the Toronto members present, and afterwards to the station, their special train pulling out at 11.30 p.m. While the banquet was in progress the ladies were taken to the Princess Theatre, by a small reception committee of Toronto ladies, where they enjoyed the performance of Sir Gilbert Parker's "Right of Way." The visitors all expressed satisfaction with the entertainment provided for them in Toronto, and went away loud in their praise of the beauties of the city.

They went from Toronto to Niagara Falls, where they spent the day following, sailing from New York on October 22nd. It was indeed a privilege for the Toronto Branch to entertain such a fine body of gentlemen, and the only regret is that they will never perhaps be passing this way again.

Mr. Hugh C. McLean, publisher of "The Commercial" and "The Western Lumberman," has purchased the C. H. Mortimer Pub. Co.'s trade papers. These papers include the "Western Canada Contractor," "The Canada Lumberman," "The Electrical News," "The Architect and Builder," and "The Contract Record." It is understood that the latter papers will be published altogether separately from Mr. McLean's original papers.

A Fight for Access to the Waterfront

THE City of Toronto is in the thick of a fight for the free use of its waterfront. It is a phase of development that most other large cities have had to pass through. It marks the passage from the stage where traffic was comparatively light, and as a consequence there was no great danger from level crossings, to the stage where both railway traffic and the ordinary traffic on the streets have grown so great that serious inconvenience and danger are caused.

The leading commercial and industrial organizations in the city have placed themselves on record as strongly favoring the elevation of the tracks, allowing only one track on each side on the level for switching purposes. As it is now, a wide expanse of railroad tracks stretch along the entire harbor front, making passenger traffic to the boats dangerous, and impeding the free use of the harbor for freight transportation.



The elevated tracks as advocated by the commercial and other interests,

The discussion which has been going on in the press and at representative gatherings of business men and citizens generally, has brought forward the whole relationship of the railways and the public so strongly that the local question has become of national interest. The results will be a fair test of the strength and influence of public opinion when intelligently directed.

It is almost a generation since the question first arose. Since then the contest has been waged chiefly around the Yonge Street bridge. When a level crossing became a peril to life, was it the duty of the railways to build a bridge over the tracks at their own expense, or was it distinctly a municipal affair, or should both contribute to the cost? The argument shifted backward and forward, with now the advantage resting with the railways, and now with the city. But this argument was not without avail. The necessity of getting some uninterrupted access to the water became firmly established.

But with the growth of the city and the constantly increasing number of trains, added to last year by the entrance of another Railway Company into the city, the importance of the problem grew. While at first Yonge Street was alone considered a pressing danger, now the need for improved conditions is felt from one end of the city to the other. Accordingly a viaduct is now demanded which will carry all the tracks above the street level, with the exception of tracks for switching purposes, the latter to be used only during certain hours of the night.

A number of considerations have to be kept in view in a case of this kind. The fundamental reason for demanding track elevation is that the public should be allowed the easiest possible access to the water. Heretofore, for various reasons, the water has not played a very important role in Toronto's transportation problem. This condition is not likely to obtain in the future. Apart, too, from the direct benefit secured, there is a distinct advantage in having the competition present. For these reasons it is of first importance that there be no hindrance to the extended use of this facility.

The elevation, however, should be such as to cause the least possible disarrangement to existing conditions. All along the right of way factories are located, with sidings connecting them to the main tracks. The elevation of all the tracks would necessitate the rebuilding of many of these factories, which have been specially arranged for receiving and shipping goods on the level. To overcome this difficulty, and to obviate any hardship, it is urged that a track be run on the level on each side of the viaduct, and that these two tracks be connected with all sidings. However, in order that there be no interruption to vehicular or pedestrian traffic, these tracks should be used only at specified hours at night. In this way the desired results would be attained at the least expense and inconvenience.

The apportionment of the cost of the work is of importance, as it will no doubt govern the procedure in future cases. This, however, as indeed the whole of the project, rests in the lap of the gods, or, to be exact, the Railway Commission. The case has been presented from all standpoints. The outcome will be awaited with interest, if not with patience.

The Promotion of Employees.

By J. F. GAIRNS

THE selection and advancement of employees is a question of the utmost importance in modern commercial and industrial business, but it is so complicated by the many side issues, and it is so difficult to classify its various aspects that the following remarks can only be considered as an attempt to review the main features of policy in reference thereto as they affect the employee and the employer.

As regards the employee, the writer proposes to consider the relative importance of the various qualifications for promotion, bearing in mind also the great differences which are created by the different professions and industries, though there is really more standardization in this respect than may appear at first inspection.

As regards the employer, the same factors will be considered, but from a different aspect, though there is considerable correspondence between them in most cases, with the object of setting forth what are, in the writer's opinion, the main considerations which should govern an employer's policy in reference to the promotion of his employees or the alternative introduction of outsiders to fill vacant positions or new posts.

In all cases a ruling consideration will be that a modern business is a money-making concern, and not a philanthropic institution.

In default of a satisfactory method of classification, the various qualifications for the promotion of an employee will be first considered, both from the employee's and the employer's standpoints, concluding remarks dealing more specifically with the advantages and disadvantages of the "promotion" and "outsider" policies, favoritism and influence and a few general features of the whole subject.

Seniority.

For the purposes of our subject this may be considered as a qualification, though it is an impersonal one.

In large establishments where many employees are engaged on the same or similar work capable of classification in a few main divisions, promotion by seniority may, and often does, answer fairly well, but as a general principle it is unsatisfactory, both from the employer's and employee's point of view. Such a policy tends to mechanical work; initiative is at a discount; the incapable man has as good a chance as the capable man, though the latter usually has to make up for the deficiencies of the former, but without corresponding advantage; work may be neglected or be indifferently performed and, so long as he does not go too far, an employee is in a fairly safe position, while superior officers are comparatively helpless in dealing with the matter, even if they are inclined to do so, which is frequently not the case; work is done without thought as to its bearing on other sections; and altogether a premium is placed on incapability, while capability tends to become degraded. It is true that where promotion by seniority obtains a few opportunities must also occur for promotion for other reasons, but unless such opportunities are frequent, what has been said above is substantially correct.

As an example of the above, civil service departments may be instanced, though in some cases the actual work required to be done tends to prevent some of the unsatisfactory features mentioned becoming characteristic. A usual and almost inevitable corollary to the promotion by seniority policy, and one which is most associated with civil service departments, is the fact that in such cases employees are rigidly classified in grades, and it is extremely difficult for an employee to become transferred from one grade to another, except in early years when examinations are available.

Promotion by seniority possesses some good features, but not many, and where it is satisfactory it will be generally found that other factors are really responsible.

Honesty.

Of the personal qualifications this is undoubtedly the one to be considered first, but in practice honesty is not always the most important.

For positions of trust and where the person concerned has to be trusted to work for the welfare of his employer though he has opportunities for doing otherwise, honesty is most important. But cases are common where a man is promoted for capability without special honesty or in order to ensure his honesty, because it is to his interest to be honest. It is not always the honest man who is promoted, even if he also possesses other qualifications, and there is many an instance where the man noted for his honesty is still in a subordinate position, while others less morally trustworthy have been promoted over his head, maybe time after time. The truth is that where honesty is all-important, then the honest man has a special opportunity, but where dishonesty is made difficult then it is other capabilities which govern promotion.

Orderliness, Neatness, Correctness and Painstaking Work.

These are very desirable qualifications, but they are sometimes somewhat out of place. A man who possesses these characteristics is very useful for some kinds of work, bookkeeping on a large scale especially, but in many instances these are subordinate requirements. It very often occurs that the orderly clerk, or the splendid writer, or the absolutely correct accountant is rather superfluous. System and checking will discount these capabilities to some extent, especially if averagely capable men are available, whose mistakes are few and far between, while the typewriter has placed handwriting in a very secondary position. Moreover, it is very unusual that these capabilities tend to mediocrity in other respects, for the man who is scrupulously exact in everything, sometimes superfluously so, is often too much concerned with details to be able to grapple with matters of serious importance and emergencies.

In industrial work these characteristics are important, for they usually make good a certainty, but even there it often occurs that they also entail slowness of production and sometimes make work unprofitable. The work when done may be eminently satisfactory, but in very many cases work less perfect is equally satisfactory.

Reliability.

There is reliability and reliability. The man whose work can be depended upon without supervision, especially in respect of details, is a very useful assistant, for he leaves his superiors free to deal only with main items. But even in this connection there is another side, for associated with reliability one often finds a narrowness of ideas, an indifference to things with which the reliable individual is not concerned, and a tendency to labor detail considerations in preference to broader matters.

Thorough Knowledge.

For good work this is essential. The man who half knows his work rarely possesses many other qualifications for promotion; but thorough knowledge is only obtained by understanding as distinct from mere routine learning. There are many employees who can do one thing perfectly, simply because they are always doing it, but this only qualifies them for similar positions, and thorough knowledge implies more than this if it is to be a qualification for promotion.

Special Knowledge.

This usually implies that a man has exercised initiative and capability and that he realizes that to possess special knowledge is to render himself eligible for special positions. In a narrow sense this amounts to specialization and is not a qualification for promotion, except when a special man is required to do special work; but in a broader sense specialization means that a man has made himself master of a particular branch of industry in order to make himself indispensable or an acquisition to an employer. In many cases such a specialist develops his own promotion, for by proceeding on special lines a desirable position is often created as business develops.

Common Sense or "Gumption."

The candidate for promotion should cultivate this qualification. While a man is only one of many doing the same or similar work, a general knowledge of his work is usually sufficient to carry him through, but it is this indefinite quality, often termed "gumption," that lifts a man above his fellows and enables him to cope with difficulties. Many a man with indifferent training or experience is really a better workman than men who have had the best of training and long experience, simply because he can use his brain to help his hands, and because he can see a little way beyond his nose.

Initiative.

In many respects this is the same as the preceding, but not wholly so, for initiative goes a step further. A man possessing "gumption" can deal with what comes before him, but an initiative man will often develop beyond that. Moreover, an initiative employee quickly becomes a marked man for selection for favored work, and, as opportunities occur, for promotion also, for he can deal with matters which arise out of his work as well as with the work itself. Further, he is naturally a leader of men, and this alone is a qualification for a controlling position.

Originality.

This again corresponds very closely with "gumption" and "initiative," but proceeds a step further. An initiative man can originate developments, but the man who posseses originality can often introduce a new method of doing things, a new system, or can effect improvement in existing methods and systems.

In inferior positions originality is sometimes at a discount, for new methods are not desired or required, but in superior positions, and especially after the early stages of promotion have been effected, it is the man with originality who comes to the fore. There is, however, a limit to originality as a valuable asset. If carried beyond applicability and due regard for existing methods and circumstances, the original man may be somewhat of a nuisance, but in such cases it generally means that there is originality without "gumption."

The remaining qualifications for promotion belong to a somewhat different class.

Supervision, Management, and Control Capability.

These are undoubtedly the principal qualifications for promotion, for although it occasionally happens that a promoted man occupies a superior position solely in reference to his own work, as a rule promotion also entails control over one or more assistants, and the promoted individual is generally brought into connection with other people's work or the work of other departments.

It does not always follow that the best workman is the best man to control others on that work, or that the best controller is the best workman. Indeed, the reverse is more often the case. The old proverb, "Practice what you preach," is a very praiseworthy and generally correct maxim, but it often happens that the person who is most capable of directing and supervising the work of others is only an average worker himself. In fact, it is not always necessary that a good controller shall even know the work in all its details, but as a rule such knowledge is essential to efficient management and control.

Management and control capabilities are to some extent natural gifts, but they can be cultivated, and without such capabilities it is unlikely that the most honest, conscientious, painstaking, correct and reliable man will be a managerial success. Things may go smoothly, but unless there is managerial ability a department thus controlled lacks strength and consistency.

It is therefore probable that many apparently unfair promotions at the expense of long-service, trustworthy men are really evidences that an employer has acted most judiciously in the interests of his business.

In addition to capability for the management and control of men or of a section of work, self-management and self-control are also necessary for efficiency. There are many instances where the personal equation of the manager or controller is quite as important as regards himself as it is in reference to those under him.

Tact.

How many promoted individuals have come to grief because of want of tact, it would be impossible to estimate; but the man who has tact usually controls a harmoniously working and efficient department. It is tact that enables him to deal with those under him, with those on an equality with him, and with those above him in such ways that harmony is maintained, work progresses smoothly, and his department developed.

Relative Value of Above Qualifications.

Having thus considered the various qualifications for promotion, their relative importance as they appeal to an employer must now be dealt with, though briefly For this purpose we must consider that a model employer is in question who considers things principally from a strictly business point of view, though with some humanitarianism, and who is capable of estimating things in a fair and unbiased manner.

Honesty, conscientiousness, painstaking work, reliability, neatness and orderliness are very desirable, but there is many a man possessing all these capabilities who is continually being passed over for promotion. As a rule he is quite unable to understand why this should be, and is correspondingly aggrieved. But his employer, and probably also many of his confreres, know that he does not possess initiative, management capability, and capacity for responsibility. Many a man by his experience has shown the truth of the saying, "A good servant may be a bad (or incapable) master," and conversely there is equal truth that "A bad servant sometimes makes a good master."

As soon as one takes a leading position, it may be as foreman of a department, clerk in charge of an office section, storekeeper, chief draughtsman, or it may be as a district representative, traveller, works manager, or general manager, then the primary requirements are, given knowledge of the work, initiative, management, capability, common sense or "gumption," and, above all, "tact." For real satisfaction, the other characteristics previously mentioned are necessary in a degree, and honesty and conscientiousness are generally required as a *sine qua non*, but initiative and capability are really more important.

When, therefore, a level-headed and fair employer has to fill a special post, or is creating a new position, he has to decide, not merely which employee most deserves promotion, but which employee is most capable. And sometimes the best solution is the introduction of an outsider. In the case of assistants who have developed their own work, or where promotion is the natural outcome of circumstances, no difficulty is experienced; but such cases are really outside our subject.

In many businesses, and especially in those associated with particular industries, the practice is to promote employees very rarely, if at all, outsiders being introduced to fill vacancies in preference; and there is a good deal to be said for such a policy. And when it is a general or fairly general policy, little or no hardship is entailed upon the employees; for although they may not be able to obtain much promotion by staying with particular employers, they are eligible for special posts with other employers, and are often specially fitted for them.

A man who is promoted over his companions is not always in a desirable position. His previous equals resent his superiority, and he himself is at a disadvantage in dealing with them. And his previous superiors cannot or will not always adapt themselves to the new conditions, nor can he always do so on his side. By changing his employer, however, a man is often able to show his capabilities in a way that he could not do by remaining in one employ, even if promoted. We thus have, besides the question of the promotion of employees, an alternative policy, that of the introduction of outsiders for special positions, forced upon our consideration, and it will be interesting to briefly summarize the advantages and disadvantages of the two policies.

I. Promotion of Employees.

1. Good service and merit are rewarded.

2. An employee is encouraged to do his best for his employer.

3. Promoted employees are familiar with the ins and outs of their employer's business and with peculiar methods.

4. Employees develop with their employer's business.

5 .Encouragement is given to employees.

6. The interests of an employer become those of an employee.

II. Introduction of Outsiders.

1. A man occupying a promoted (to himself only) position is free to show his capabilities.

2. Men become familiar with the methods and practices of more than one firm.

3. Knowledge is extended.

4. Employers benefit from the introduction of men having experience other than their own.

5. Knowledge, capability and experience are at a premium.

On the other hand, the disadvantages of the two policies may be similarly expressed:

I. Promotion of Employees.

1. Non-promoted employees may be aggrieved and disheartened.

2. The promoted employee is not necessarily the most capable one, though he may be the most deserving.

3. There is a tendency to stagnation, for a promoted employee usually carries on, the methods and practices of his predecessor.

4 A promoted employee may occupy an anomalous position in dealing with those below and above him.

II. Introduction of Outsiders.

1. Employees passed over by newcomers may be aggrieved and disheartened.

2. The newcomer is somewhat of an interloper, and though he knows his work, he does not know the peculiar methods of his new employers.

3. Other ideas or familiarity with other methods will not always work well with those of the fresh employment.

4. A new man can quickly make enemies of those with whom he has to work, or with those below or above him, but it is less easy to change them to friends.

5. The interests of employees need not coincide with those of an employer.

It will be seen that in both cases (1) is the same, but when the introduction of outsiders is a usual policy, it is of little importance, for when it is known that particular men are introduced for particular positions, inferior employees realize that their own opportunities are to obtain similar positions somewhere else.

So far we have considered that employers are always judicious and level-minded, and that they act rightly and for the good of their businesses, humanitarianism being only introduced where it agrees with commercial acumen.

But, unfortunately, not all or nearly all employers fulfil these conditions, any more than all employees possess the required characteristics which render them eligible for promotion.

Many an employer acts injudiciously in regard to the filling of vacant positions. Sometimes humanity overrides proper business consideration. Sometimes the maxim that "a money-making concern is not a philanthropic institution" is carried to an extreme. In other cases the claims of kinship, friendship or acquaintance, influence and favoritism override the claims of merit, capability and fitness for a post. Further, it is nothing unusual for personal liking, prejudices or idiosyncrasies to overweigh judgment. Also there are many cases where principals or superior officers have the responsibility of decision without having the facilities for proper knowledge to guide them; and in other cases superior but subordinate officials can exert an influence that militates against the promotion of those employees who should be considered, and the writer has seen it seriously argued in reference to a large business having many ramifications, that it is better for a subordinate to become known to his principals for his misdoings than not to be known at all, for sometimes where applicants for promotion are all unknown, it may be that the familiarity of a name, the cause for such familiarity being overlooked or forgotten, may be the sole reason for a particular promotion.

It therefore behooves all employers, particularly those in control of extensive businesses, or chief officials themselves, responsible for the promotion or otherwise of employees beneath them, not only to act with proper regard to the well-being of business, but also with proper regard for their employees or subordinates.

Having thus reviewed briefly the principal considerations which affect this subject, a summary can be made as follows:

(1) In ordinary routine and mechanical work, the promotion of employees is a general practice. In fact, in the usual way, it occurs in the natural course of events and development.

(2) For superior positions, where a knowledge of methods and practices of a particular business, as distinct from the practices of businesses of similar kind, are concerned, promotion of employes is best, for the reason that the man who has worked up is usually the only one who can know the details necessary for control.

(3.) For superior positions, where knowledge of the methods and practices of a particular trade or industry, as distinct from the methods and practices of a particular firm, are concerned, the introduction of outsiders is often a preferable policy.

(4) Honesty, conscientiousness, careful and systematic work, and like characteristics, while desiderata, are not necessarily the only or principal credentials for promotion, though honesty and whole-heartedness may be said to be requirements in all cases.

(5) Managerial and controlling capabilities, initiative and tact are, as a rule, more important reasons for promotion than the characteristics set forth in (4).

(6) The combination of (4) and (5), though rather rare, should provide a practically certain argument for promotion.

(7) Humanitarianism and regard for employees should be introduced as far as possible, but in a money-making concern may not always conduce to the well-being of a firm, if carried to an extreme.

(8) Initiative and originality should be encouraged.

(9) The interests of an employer should be, or should be made to be, those of his employees.

(10) Harmonious relations should be cultivated between employer and employee, and between superior and other employees.

(11) Promotion, if a recognized policy, should be made with discretion, and with due consideration as to the possession of the necessary qualifications by the employee promoted.

(12) If promotion is not a recognized policy, usual methods should not be departed from without very good reason. At the same time, the promotion of a specially capable man will probably give general satisfaction.

(13) Specialization is good to a degree, but should not be a fetish with employees.

(14) Favoritism, influence, personal bias, prejudice, unreasonable selection and the claims of kinship or acquaintance should not be factors in deciding as to the promotion of employees. It sometimes occurs that such promotions are justified in practice, but that is due to the fact that the man promoted or appointed possesses the required capabilities.

(15) Just as the possession of certain characteristics in that others may be a bar to promotion of an employee, so judiciousness and level-headedness, with proper consideration before action, are required in the case of an employee or of officials responsible for promotion of employees or the introduction of outsiders.

A good deal more could be said on this subject, but enough has been said to indicate that the responsibility of the employer in deciding as to his promotion policy is great, while the characteristics required to fit an employee for promotion are also varied. As regards an employer who does not possess the necessary qualifications for correct decision, it is impossible to lay down any rules or to systematize the situation, though it is hoped that perusal of the foregoing may be useful in some such cases.—*Cassier's Magazine.*

BANQUET TO MR. G. A. VANDRY.

A complimentary banquet was tendered Mr. G. A. Vandry by a representative gathering of members of the Canadian Manufacturers' Association, on his return from a trip around the world recently. The Chateau Frontenac was the scene of the function, which was honored by the presence, in addition to the guest of the evening, of Hon. J. D. Rolland, President, Dr. Morin, Quebec Vice-President, Major T. S. Hetherington, Chairman Quebec Branch, and many other prominent members of the Canadian Manufacturers' Association.

After the dinner, Major T. S. Hetherington, who presided, proposed the health of Mr. Vandry. He referred to the fine business ability which he had exhibited in his management of the Paquet Company, and expressed the warm appreciation of him by his colleagues in the business world. The toast was received with great enthusiasm.

Mr. Vandry, after thanking his friends for their exceeding kindness, spoke of the pleasure he had felt in hearing of Mr. Rolland's election to the Presidency of the Association. He recalled that seven-eighths of the members were English-speaking, and so the election of a French-Canadian was a remarkable act of courtesy. Acts like that of the election of Hon. Mr. Rolland were to the honor of the English element. The descendant of a noble and proud race, the French-Canadian was sensitive to kind deeds, and his English fellow-members might rest assured that the act would be fully appreciated.

He then went on to describe his trip. Passing over the British Isles, Germany and France, which those present were acquainted with, he gave a most interesting account of the people and customs of Russia, Siberia and Japan. He also discussed the condition of Western Canada as he found it on his return to Vancouver. Mr. Vandry's speech was listened to with great enjoyment.

The health of Hon. J. D. Rolland was proposed in felicitous terms by Dr. Morin, and responded to by the President. The health of Major Hetherington and Mr. Geo. Amyot were also honored and appropriate replies were made.

CATALOGUES.

"The Factory Behind the Bearing" is the title of a booklet recently issued by the Chapman Double Ball Bearing Co., of Toronto. It contains an entertaining account of the evolution which has found its completion in the double ball-bearing. The discussion of the subject of friction is of inestimable value to users of machinery. The booklet is illustrated with views of the factory in which the bearings are made and the completed parts. A copy will be sent on application.

Specialties—Commercial and Miscellaneous is the name of a monthly publication issued by The Armac Press, Toronto. These enterprising commercial printers are interesting the public in their work by the excellence of their advertising ideas. The present number is fully up to the standard which they themselves have set.

The Goldie and McCulloch Co., Ltd., of Galt, have issued a catalogue which will be of great interest to the users of all classes of engines. The Ideal engines have been kept well before the public and their merits are fully recognized. The present catalogue, No. 6, shows illustrations of the various types of high-speed engines, with description and specifications. The catalogue will be sent to any address on request.

An attractive booklet has been issued by the city of Calgary, Alta. Besides giving a statement of the present industrial condition of the municipality, it contains the annual report of the Board of Trade, and an outline of what is being done to bring factories to the West. The booklet is artistically and effectively gotten up.

Book Reviews

A BOOK WORTH READING ON INDUSTRIAL PROBLEMS.

Mr. Henry Wood is the author of a useful little book, *The Political Economy of Humanism*, recently issued by Lee & Shepard (Boston). Writers of this class are gradually educating and moulding the reading public to conservative views on many irritative industrial problems. It is unfortunate that their books are so little read by the mass of workingmen and women. When so-called labor leaders are allowed to address meetings of laboring men and make assertions that are as false and misleading as themselves, the conviction comes home to one that the daily and monthly press have a great public duty to perform in counteracting irresponsible influences, and giving everyone the benefit of responsible investigations.

The present writer is an advocate of labor organizations; but he frankly points out certain defects that are worth studying: Labor unions, he says (1) Are adopting in spirit and temper an antagonistic attitude to capital; (2) Discouraging individual industry and excellence and tending to wards dependency; (3) Compel thoughtful workingmen to surrender thmselves to others whose judgment is often faulty or prejudiced; (4) Are tyrannical towards all non-unionists; (5) Tend thus towards a levelling, coercive socialism.

He points out, also, the obligations and privileges of employers, the abuses of corporate powers and the needs of industrial education. His style in writing is pleasing and his judgment most helpful. Let the daily press, who are handing over labor columns to labor agitators, use that space to reproduce and disseminate such thoughts as are contained in this small volume.

THE FEDERAL POWER OVER CARRIERS.

The Macmillan Company, of Canada, have just issued a book on this subject, by Mr. Z. Parmelee Prentice ($1.50). Now-a-days constitutional questions are again becoming painfully prominent. As in the United States so in Canada, legislators and students are having to reconsider the distribution of powers between federal and local governments in the light of modern needs. The distribution is one of expediency, whether the policing is to be municipal or provincial or federal; whether street railways are to be regarded as part of the federal domain, etc. It is the extreme importance of what is expedient that is forcing people to retrace their steps back to the mass of later legal decisions. This stands sure: control of corporations of whatever kind, in the interests of corporations themselves, must be made effective. Justice must be expedited and democracy safeguarded.

AMERICAN IMMIGRATION.

"Races and Immigrants in America" is the title of a most interesting volume by Professor John R. Cummins, of the University of Wisconsin, just issued by the Macmillan Company of Canada (Toronto, $1.50). No more vital problem can one find for American citizenship than the subject there dealt with, and it appeals naturally to Canadians who are meeting many of the same knotty problems in national development.

On the slender original parent stock in the United States has been grafted many a branch until the result has come to be something radically new. The Americans are not Englishmen. They are a twentieth century melange of Europeans exploiting the great national resources of a big country under a political constitution, framed on an old English model, speaking the English language and inspired by big, good-natured ideals. They fascinate one because they are so endlessly curious and potentially so overwhelming an influence in the world's social and political evolution.

Did you ever stop to think what the world would have been had not the flood gates to the new world been opened for a century to the downcast and oppressed of Europe? Emigration is the strenuous attempt to do better. It is the angel of hope. For a number of years it looked as if the United States was to be composed mostly of Germans, Scandinavians and Irish. Of late years the flood has turned from north to south Europe, and Italians, Greeks, Hungarians, and Jews are the new elements offering.

Industrially the United States has been long leaning on these new comers. Were it not for them much greater attention would have had to be given to apprenticeship and technical training. The popular interest now being taken in technical education is therefore significant. It means that the great mass of workmen have come to see that to give skilled work to the foreigner is suicidal for the native artisan. The newcomer for the time being is naturally willing to work harder than ever. He is a stranger in a strange land and must sink or swim through his own exertions. He probably is without a family and for a time is able to underbid all competition.

Professor Cummins looks on the Trade Union as one of the great organizers of these new comers. As soon as workmen become economically equal they reach the level of American citizens, and Negroes, Jews and Gentiles become unionists, answer to the call of some Irish organizer and promulgate ideals against the sweat work they themselves have passed out from. The author does not fail to note with an air of regret and concern that the Saxon stock of the West is being seriously depleted by the immigration of farmers to Canada, who sell their homesteads to newer comers, usually of some non-English strain.

5,000 FACTS ABOUT CANADA.

A new edition has already been called for of the booklet containing "5,000 Facts About Canada," compiled by Frank Yeigh, of Toronto, and issued by the Canadian Facts Publishing Co., of that city, at 25 cents per copy. Nearly 20,000 have been sold in the few weeks since its appearance, the demand therefore coming not only from every part of Canada and the United States, but the British Isles and Empire. The publication certainly measures up to its claim of being "worth its weight in Yukon gold or Cobalt silver," and a copy should be in the hands of every intelligent Canadian.

Some years ago a fleet of British colliers was sunk during a storm in an English harbor, and remained under water for five years before being salved and brought to the surface. An examination of the coal showed that it had kept its value for steam purposes, and this led to some experiments by the naval authorities, which settled beyond all doubt that coal stored under water did not deteriorate as when stored in the air. Taking heed of this conserving power of water, the Western Electric Company is building flooded coal pits at its plant at Hawthorne, Ill. The excavation is 320 by 75 feet and 12 feet deep, built of concrete, and divided into twelve pits. The coal is dropped directly from the cars, which pass over the pits, and the fuel is removed when desired by means of a steam shovel.

TRADE WITH JAMAICA

MORE than once of late it has been pointed out that Jamaica provides a natural market for Canadian products, which has never received the attention that it deserved. The British West Indies occupy a peculiar position geographically and politically. They are cut off to a large extent from all other parts of the Empire, and they are placed in close relationship with a commercial and industrial country that would naturally exercise a predominating influence over them. Placed at the very doors of the United States, they are in the somewhat unfortunate position of growing almost exclusively things which are grown within the American Republic, and so they are placed at a disadvantage in dealing with that country.

The nearest market within the Empire is Canada, and it is to this country that the people of Jamaica are now turning their attention. That a closer trade relationship between the two countries would be of benefit to both is shown by even a casual glance at the trade figures.

Before discussing the reasons why a profitable trade could be done between Jamaica and Canada it might be well to look at some figures for some years back. At present the United States have the lion's share of the business. The following comparison shows the value of goods exported to Jamaica from Canada and from the United States for the year before last. Last year's figures are not yet complete, but they indicate little change from those herein given:

	From Canada.	From U.S.
Ale, beer and porter	$.....	$13,948
Animals, living	11,534	360
Bread and biscuits	268	36,222
Cheese	32,655	37,648
Butter and its substitute	5,747	17,369
Drugs, medicines, etc.	1,528	47,922
Fish	458,800	201,558
Flour	14,688	760,796
Lard	.....	11,787
Leather and manufactures of	287	168,980
Meats	141	196,987
Metal and manufactures of	543	274,971
Spirits and wine	205	8,278
Textile manufactures	876	203,558
Tobacco	78	6,059
Vegetables (fresh)	8,278	10,361
Wood and timber	8,015	262,177

There is scarcely an item on this list which Canada could not sell to advantage. The biggest imports are of flour, meats, fish, metals, textiles, wood and timber, and leather. We are in as good a position to sell these as the United States. The sentiment is in our favor, the people would prefer to purchase their supplies from us, we have the goods to sell.

Why, then, is such a large percentage controlled by the United States? There are two chief reasons which naturally suggest themselves. First is the fact that New York enjoys a better and more frequent freight service than do the ports of Canada. This is but another example of the great bearing of transportation on the problem of trade. Time and cost are the factors, of which the first is not the least. When a merchant wants goods he usually wants them promptly. The time at present taken for an order to go to Canada, be filled and the goods to be shipped to Jamaica, is a great barrier to trade. Increased steamship service, with faster time and proper cold storage equipment, is a *sine qua non* of a satisfactory commerce.

The second important reason for the United States' trade being greater than Canada's, consists in the fact that the manufacturers and merchants of the United States have a proper appreciation of the importance of the market. They go after business. To sell a people goods it is necessary to understand their needs. It is not sufficient to say that certain goods are correct, that they are the most effective for the purpose, that their build is the best. Local ideas or prejudices have to be considered. The British manufacturer has been frequently criticized for this very thing. He has refused to adapt himself to different conditions. There is a limit to the advisability of trying to sell a man what he ought to want instead of what he actually does want.

So the personal representative accomplishes a double purpose. He secures business which it is impossible to get by correspondence alone, and he keeps in touch with the actual consumers. He gets to understand their viewpoint and he caters to it. Canadian merchants are probably not in a position to get after business in this way, but it is essential that some similar scheme be worked out, either by joint representation or some other system whereby the market can be understood and personally worked.

The source of Jamaica's supplies is given in the following tables:

Live Animals, Food, Drink and Narcotics.

		P.C.
United Kingdom—		
1903-4	£155,725,	or 19.7
1904-5	144,223,	or 21
1905-6	160,400,	or 22.1
United States—		
1903-4	460,930,	or 58.3
1904-5	397,038,	or 59
1905-6	380,919,	or 52.5
Canada—		
1903-4	133,788,	or 17
1904-5	112,465,	or 16.4
1905-6	148,044,	or 20.4
Other countries—		
1903-4	39,516,	or 5
1904-5	30,114,	or 4.6
1905-6	36,309,	or 5

Raw Materials (Exclusive of Coal).

		P.C.
United Kingdom—		
1903-4	£86,653,	or 80
1904-5	60,166,	or 61.7
1905-6	38,237,	or 44.6
United States—		
1903-4	20,321,	or 18.7
1904-5	35,755,	or 36.7
1905-6	44,149,	or 51.5
Other countries—		
1903-4	1,394,	or 1.3
1904-5	1,516,	or 1.6
1905-6	2,066,	or 2.4

Manufactured Articles.

		P.C.
United Kingdom—		
1903-4	£387,240,	or 63
1904-5	583,604,	or 65
1905-6	730,531,	or 66
United States—		
1903-4	371,875,	or 34
1904-5	286,470,	or 32
1905-6	330,619,	or 32.8
Other countries—		
1903-4	32,179,	or 3
1904-5	27,180,	or 3
1905-6	38,225,	or 1.2

From the above it will be noticed that with the exception of the first category Canada figures only among the other countries, her exports being too small for individual mention. Last year Jamaica imported over five million dollars worth of manufactured goods. Canada supplied about one per cent. The United States supplied thirty-two per cent. Such a condition is not flattering to our business acumen. It must not continue.

The most satisfactory trade is that which is mutual. What can we buy from Jamaica to offset our sales to that country? The answer lies in the reports of our trade and commerce. In the five months ending with August, 1907, which is as far as the reports have been issued, Canada imported from the British West Indies sugar alone to a value of nearly three million dollars. For the twelve months this will approximate seven millions. Then Canada can use tropical fruits, bananas, grapes; also cocoa. In fact all the products of the fruitful districts of Florida and California are indigenous to these islands. Everything is present to make commerce desirable. It remains for the merchants and manufacturers to crystallize those possibilities into trade returns.

Industrial Discussions

A UNIQUE PROFIT AND LOSS SHARING PLAN.

A manufacturing company in Bridgeport, Conn., conducting its business on a profit-sharing plan, has used a unique form of contract for six years.

The significant features of their profit-sharing contract are as follows:

(1) Employer and employee agree to share *both* profits and losses.

(2) Net gain or loss is ascertained by deducting from the gross results of the inventory on the first of February all expenses for the year previous of every kind, including depreciation of buildings, tools, machinery, and bad debts. In the case of gain, the capital invested, as shown by the inventory, shall first draw 6 per cent. interest "or, in case there is less than that amount, shall draw what there is, in liquidation of its claim"; the balance, then remaining, to be divided between the company and the individual employee in the proportion which the capital invested bears to his total wages for the year.

(3) For each current year, one-tenth of the wages of every employee, who is a party to the contract, is withheld each week. In case there is not a net loss on the entire business of the year, this reserved money, together with any accrued profit, as figured above, is paid to the employee, on or before March first of each succeeding year.

(4) In case of a net loss on the business of the entire year, without figuring any dividend as above provided for capital, this loss is divided between the company and the employee in the same method as that prescribed for the dividing of profit; but in no case does the employee become responsible for losses greater than the amount reserved from his wages.

(5) Other employees may become parties to this contract upon the invitation of the company. Any employee may withdraw from the contract at any time, and from the firm's employ, but the company then holds the right to retain the 10 per cent. reserve till the end of the current year. In case it is so held, its owner shares in the company's profit or losses.

(6) The firm may discharge any of its employees, but in that case he shall have the option of withdrawing his full reserve, or of leaving it till the end of the year, to share in profits and losses.

(7) It is agreed by the company that none of its employees who signs this contract shall be temporarily retired from work so long as the company has any work of the kind he is accustomed to do; but if there is a shortage of work in the hands of the company it shall reduce the hours of work, and so divide the work among its employees. If at any time an employee becomes sick or incapacitated to perform his duties, and has a certificate of a reputable physician that he is so incapacitated, he may draw on his reserve wages at a rate not greater than six dollars a week, without affecting his interests in the profits at the end of the year. If any employee is injured by any accident while in the employ of the company, the company, at its own expense, provides him with a competent physician or surgeon, upon application stating that such services are needed.

Such is the contract. In practice, it does not apply to the whole labor force. The company did not think the proposition would appeal to their unskilled laborers, comprising about two-thirds of the number in their employ. As regards the skilled laborers, it has been the company's practice not to invite further signatures to the contract at any time when three-fourths of their skilled laborers are already working under it; for the amount of business on hand is subject to some fluctuations, and the firm do not wish to enter into this relation with a larger number of employees than they can be reasonably sure of providing with steady employment. This limitation, however, does not apply to the office force. The result is that, out of a labor force of about 250, there are eighty who are eligible to admittance to the contract, and sixty are actually so enrolled. No man is ever urged to become a party to it, but there is always a long waiting list.—*American Industries.*

THE UNFORTUNATE ELEMENT.

Thrice blessed would be he who could hit on a mode of improving the relation between employer and employed and making it in some measure at least a partnership, instead of this war pregnant with evil consequences to the commonwealth as well as to the shop. Artisans are now, it seems, being dismissed in considerable numbers, partly, no doubt, owing to a temporary slackness in trade, but partly also to their extreme demands. It must be in the employer's interest as a rule to concede as much as he can, to keep the same men, and if possible attach them to his service. Unhappily, it is not with the men alone that the employer has to deal. He has to deal with the agitator, between whom and himself there is no sort of tie, and who is apt to be thinking of his own ascendency and playing his own game—*Bystander, in The Weekly Sun.*

A SUCCESSFUL APPRENTICESHIP SYSTEM.

The supply of efficient workmen has been discussed from three standpoints during the past few weeks. More than one authority among manufacturers has welcomed a temporary relaxation in the demand of manufactured goods on the ground that it would result in raising the efficiency of the working unit. Where so much work was offering there was little difficulty in holding a job. Employers were forced to go on the principle that any labor was better than none, with the result that careless and slip-shod work became the common thing. This was sometimes condoned by the manufacturer, who was so pressed for deliveries that everything had to be sacrificed to speed.

A slackening in business, it is pointed out, will go far to rectify these shortcomings. When a few of the most inefficient are laid off, when there isn't a job for everybody, there will be greater care among those who are left. They will do better work. They will recognize that if their work isn't good, someone else will be found to do it.

Then there is the necessity of technical education to give the workingmen, particularly the boys and young men who are just entering upon their life work, the higher knowledge which will lift them into the highest ranks of efficiency. Industries have expanded so rapidly that the supply of skilled workmen has fallen far behind the demand. Moreover, the high specialization of present manufacturing methods has made it difficult to train a workman adequately in the shop. Hence the demand for technical schools is most urgent.

Finally, the apprenticeship system, which formerly was the road which all boys had to travel before becoming competent journeymen, has been discussed. The system is not dead, although it has disappeared from many shops. A significant example of what may be accomplished by a well-conducted apprenticeship system may be found at the works of the General Electric Company, at Lynn, Mass. The establishment of this system has been the outcome of a careful study of existing apprenticeship systems and their weaknesses. Thirty or forty years ago, when the entrance upon a skilled trade was universally achieved through the door of an apprenticeship, a boy was apprenticed to a journeyman who practised the trade in all its parts. Having a personal interest in the boy, the journeyman initiated him into the mysteries and arts of the trade, until the apprentice, after five or six years of tutelage, took and held his place by the side of his master. The introduction of the factory system and labor unions brought about a change in the condition of the apprentice.

As the shop departments grew and a larger percentage of unskilled labor was employed in the factory, the foreman or his assistants felt less inclined and were, in fact, less able to devote special attention to the training of the boy, and then under the rules of the labor unions only a limited number of boys are qualified to serve an apprenticeship.

The General Electric Company, at Lynn, therefore, took the next logical step in the development of apprenticeship systems. It appointed a supervisor of apprentices, and placed him in charge of a special training department for apprentices, where the boys may receive their initial training under expert supervision in a thorough and systematic manner.

Under the system prevailing at Lynn every boy who wishes to learn a trade must serve a trial period of two months in the training room. During that time he is under close observation of the supervisor of apprentices, both as to his mental and moral make-up, and as to his ability for and attitude toward the practical work. Immediately upon entering the training room the young candidate is put at a machine and required to perform useful work. If he proves, during the trial period, that he possesses the right qualifications, he is allowed to sign the regular apprenticeship agreement, which calls for a service of four years for machinist, tool maker and pattern maker apprentices and three years for moulder apprentices. The apprentice remains now in the training-room for a period of about a year and a half to two years, according to his individual ability, and during that time is given an opportunity to work with the different machines and tools, and to perform different operations on a variety of work. At the end of this period he has gained a general knowledge of the trade and an ability for the work which must now be rounded out by a longer experience on a larger variety of work, such as the factory itself offers. The apprentice is, therefore, transferred from the training-room at the end of about two years to different departments of the factory, until at the end of the four years' term he is well qualified to assume a position as regular journeyman at journeyman's wages.

The boys, moreover, are taught to instruct others; for the object is to create a supply of skilled mechanics from whom the assistant foreman, foreman, and superintendents of the company may be chosen. Each boy, therefore, must help to break in a less advanced apprentice in one of the operations before he himself may advance to a more difficult task. The regular instructor, however, starts off the team of boy-teacher and boy-pupil, and follows their joint work from time to time throughout the day; this arrangement permits the instructor to supervise a large number of such teams in addition to the regular work of the department. Pedagogically this pupil teacher system is significant; for it tends to throw boys upon their own resources, thereby making them think for themselves; it develops in them the power to impart information and to make others perform the processes which they themselves understand; and, finally, it initiates them into the art of handling work and workmen. A possession of these qualifications determines to a large extent the success of a foreman, superintendent, in fact, any leader of men in whatever walk of life he may be engaged.

EFFICIENCY OF LABOR.

The gravest evil from which this country is now suffering, graver by far than the exaggerated dangers from monopolies or from freight rebates, is the decline in the efficiency of labor. It finds expression in slouchy work on the part of those who know how to do better, and poor work on the part of those who have never been taught or are incapable of learning. To the more serious defect of lowered quality is added the troublesome feature of lessened quantity. It is a curious fact that the one question above all which is uppermost in the minds of manufacturers and other employers of

labor, and which is privately discussed by them with helpless iteration, is so rarely touched upon in public utterances.

The hope of developing some remedy is the only consolation to the employers of labor when they face the prospect of a decline in the volume of business.

There has been an extraordinary demand for labor of all kinds. So far as that has raised wages and directly increased the cost of production employers have had no grievance, although it is a troublesome and difficult matter to carry them back to the normal level. Manufacturers know that prices for their products usually decline more rapidly than the labor cost, and must be willing to face that contingency. The laws of supply and demand never operate so promptly in the one case as they do in the other.

As for the quantity of output of labor, that, too, responds fairly well, when the demand for labor declines. The process of weeding out the lazy and the inefficient begins promptly, and it may be accepted as a general fact that few managers have not thoroughly examined their rolls with a view toward making their selections. The percentage, usually, will be small, but the moral effect is quite out of proportion to the numbers. During the past two years the knowledge that a job was waiting for any man who was willing to take it has had a demoralizing effect upon all labor throughout the country.

The fact will be firmly realized soon that steadiness, reasonable industry, and acquiescence in necessary measures of discipline are primary conditions for employment, and that simple application for work is not the only qualification.

There is every reason to hope, too, that a lessened demand for labor will be reflected in better quality of work, although in that respect deeper causes have been operative than temporary high pressure of production. The effect of levelling down which has been the curse of the labor unions can not be so quickly eradicated. It is true that the concentration of industry into larger units tends to deprive an individual workman of the hope of starting on his own account, and the necessity for preliminary scientific and technical training is closing him out of the ranks, once open to him, of managers and superintendents. It is further true that in the days of an extraordinary demand the manufacturer has often permitted or even encouraged some sacrifice of quality for the sake of quantity. But granting that all these factors have been at work, there remains a residuum of wretched work which must be directly charged to the spirit in which labor is facing its tasks. It almost seems as though the hard school of adversity can alone bring back a realization of the fact that the world owes a living only to those who deserve it.—*The Iron Age.*

A PLAN OF INDUSTRIAL EDUCATION.

A little more than a year has passed since the organization of the Massachusetts Commission on Industrial Education. This Commission, which is definitely instructed by statute to proceed toward the actual establishment of industrial schools, has largely devoted its time to preliminary study of existing conditions and to initiatory movements looking to that result.

It has definitely recognized the need of "industrial intelligence"—that is, compehensive insight into and intelligent interest in the various trades—as well as skill therein. It has been deeply impressed with the necessity of providing an all-round training in different trades as the only means under present conditions of developing men for the positions of foremen, superintendents and managers.

A very careful examination of over 2,000 Massachusetts boys seeking employment revealed the fact that nearly 900 would have gladly remained in school longer if they could have been taught some specific trade. Fully a thousand employers have been interviewed, and almost without exception have emphasized the fact that the boy is practically valueless as an industrial factor until he passes the age of sixteen. This condition, combined with the general dissolution of the old apprentice system, throws into purely juvenile occupations a multitude of boys and girls ranging from fourteen to sixteen years of age. At present these are practically wasted years. They are, however, peculiarly available for preliminary instruction in industrial lines, not for mere manual training, but in preparation for specific trades.

The Commission, therefore, seeks as a finality in its plan to provide vocational training for both boys and girls of ages ranging above fourteen years. Through industrial schools planned with this result in view a new educational need would be met. The work would parallel, but be independent of, that of the existing higher schools. Such schools, in the belief of the Commission, should offer four years of training. The first two years would include general shop instruction, mathematics, drawing, natural science and English. The work of the last two years could then be gradually completed during a longer period, in the evenings or on the part time system—*i.e.*, the alternation of a day's work in shop and school. This latter arrangement is compulsory in many of the foreign schools, the manufacturer being required to allow the employee the time therefor. Under the conditions of higher education the University of Cincinnati is already working under this plan; two students alternating, one working in the shop one week, the other in the school, then changing places for the next week.

Of course, the complete scheme of the independent school must be developed gradually, and in conjunction with individual municipalities. In the meantime immediate attention is being given to the establishment of evening schools. During the past month definite progress has been made along this line. For instance, in the city of Cambridge, evening instruction is to be furnished for machinists, pattern makers and forgers (utilizing therefor the equipment of a manual training school), and of mechanical and free hand drawing, domestic science and dressmaking. Under the provisions of the law the State pays in this case one-half the expense. In other communities similar work is progressing. The returns from inquiries to workmen indicate a large number desirous of availing themselves of the opportunities which may be provided. Proportional returns from workmen in the mechanical trades of such a city as Worcester would, for instance, indicate fully 2,000 as likely to take advantage of such instruction.

Early opposition, which existed largely through misapprehension, is vanishing, and a spirit of hearty co-operation is developing on every hand. It is becoming clearly recognized that, in order to hold its own among prosperous communities, Massachusetts must take the lead in the production of the highest and the finest grade of goods. It is practically devoid of raw material, but still proud of a population of superior workmen. But in too many industries the extremely fine division of labor gives practically no opportunity for the training of the all-round workman and his promotion to positions of greater responsibility. As a consequence, foremen and superintendents are being brought from abroad, where they have received the necessary training at public expense. On the other hand, the foreigner of low intelligence, because of the simplicity of the operations which he alone is permitted to perform in many industries, readily usurps the place of the native-born, and so the candle is burned at both ends.

The Inspiration of Competition

It Stimulates to Success

MR. JOHN J. ROBERTS discusses in the last issue of *Success*, the important significance of competition in the business world. It is, he points out, an incentive to the business man to conquer all obstacles and attain the greatest possible success.

Just as the keeper of a light-house is likely to think the world a very wet and lonesome place, just so are we all too prone to view things through the narrow slits of our own business visions. We are too prone to look downward, and backward—at our own struggle-stepped paths and hard-won accomplishments; instead of upward and forward—at the open oportunities a willing future invites us to win.

And so it is that we are likely to shudder in apprehension at the merest hearsay rumor of coming competition. So it is that we are wont to look on the newcomer in our field as a hideous monster, about to crowd us from our vantage points, threatening to throttle our hopes and thwart our plans.

Let us unbend, for a moment, from our cramping tasks—let us take our tired eyes from their monotonous strain, and let us look competition squarely in the face, without prejudice, without fear. Let us study it, analyze it, classify it.

If it be a power for good, let us learn to avail ourselves of it. If it be a menace, let us learn to meet it bravely.

Two Classes of Competitors.

Once in this attitude of mind, we find that there are two kinds of competitors; the one who sets out to steal our plans, our experience, our trade; and the other, who unaware perhaps, of our very existence, is tempted into the range of competition by the glittering success-opportunities he thinks he sees.

It is of first importance that we resolve each competitor into one or the other of these two classes. If he be of the former class, he may be expected to give us what, for simplicity, we may term *unintelligent* competition.

Such a competitor is more to be pitied than feared. He will create no profits for himself. He will cost us little of ours.

For the pirate in business cannot hope to succeed. He can copy the things he *sees;* he can imitate the methods he *thinks* we employ; but he can find no substitute for the hard-pan experience, no counterfeit for the judgment and stamina that can be had only in the stern school of "Learn to Do by Doing."

Success in business lies not in plans, in schemes, or in the mechanism of method. It lies in the minds that evolved them! Success lies not in an established trade. It lies in that genius that built, managed and handled and held that trade.

Study Competitors.

But *intelligent* competition—the competition of men of sense and standing and capital—how shall we deport ourselves toward that?

Welcome it. Watch it. Profit by it. For intelligent competition will see opportunities that we have failed to see; intelligent competition will invest money in experiments that we have not dared to try; intelligent competition will open up new markets, stir up fresh interest, create new demand. It will unearth new possibilities to our astonished eyes.

And by all of this we profit!

Competition must meet the same problems that we have met. If we advertise our products or our wares, competition, too, must advertise. If we do not advertise, competition may be able to show us the way. If we have salesmen on the road, so, too, must competition have its salesmen.

And every move it makes is a move worth watching.

But our "market"—what shall become of our market when it is cut up into small bits by competition?

That is our dread of competition—our dread before we have learned that market knows no limits, save the limits of human demand; and human demand may be doubled, almost, overnight.

When we look at our slender lists of customers, and see the scattering names that we have gathered into our ledgers through years of effort, it seems that competition must surely be a dread and dangerous thing. But when we look at the market that is yet to be won, at the customers that might, and may, be ours; and when we consider that intelligent competition, if it is to succeed, itself, must open up new markets, must find new avenues of trade, by which we, too, may profit; then we see that competition will broaden our fields and increase our profits.

Develops the Individual.

But competition is not alone a maker of market—it is a maker of *men*. Competition will keep us, as individuals, from lulling ourselves to sleep with pleasant dreams of easy wealth,—dreams that close our eyes to to-day's work with alluring pictures of to-morrow.

Competition will harry our sense of contentment, and put action in our limbs and strength in our arms and alertness in our minds. It will make us do things with a spirit that nothing else but competition could inspire.

The rosy goal of ambition isn't half so effective a spur as the pointed goad of competition. Which do you suppose a jockey in a horse race is thinking of, as he turns the last quarter post—the $400 purse that is his, if he wins, or the fact that he can feel the hot breath of the panting animal at his side which threatens to rob him of the glory of the race?

What do you think that hustling corner merchant puts into his work that makes him win—the abstract thought that he must please his customers, or the concrete knowledge that his neighbor across the street is straining every nerve to beat him?

Which do you suppose is the greater incentive to invention—the idealistic dream of improvement, or the cold, hard fact that there is a competitor to outwit?

What is it that makes men unloose their belts and shower their fullest energies on their tasks, what is it that makes over-time a willing service—the flowery beds of commercial ease, or the snap and crack of the competitor's whip?

Truly, our competitor is a better guide and adviser than our friends! He sees our weaknesses, to which our friends, in their nearness, are blind. He sneers openly at our faults when our friends preserve a well-meant but unjust silence.

Even while the shallow praises of our friends fill our ears, we hear the chortle of competition.

And when head-long impulse threatens to drag us into entanglements, it is the thought of competition that keeps us careful and saves us from foolishness.

Does personal vanity tempt us to erect an extravagant and needless plant? Competition cautions us to go slowly—we may need our reserve capital to meet its onslaught.

Are we dozing off into the slumberland of "letting well enough alone?" Competition will wake us up and enable us to shake off the sleep of business death.

Among the Industries

The Canadian Gypsum Co. has been incorporated with a capital of $20,000, and head office in Toronto.

Cleveland, Ohio, parties will commence to manufacture a full line of paint products at Winnipeg in 1908.

The British Canadian Distillery Co. has been incorporated with a captal of $250,000 The head office is Owen Sound.

The Standard Drain and Pipe Works, of New Glasgow, whose plant was destroyed recently by fire, will rebuild on the old site.

Capitalists interested in the Nipissing Cobalt property contemplate building a smelter in the north. North Cobalt has been selected as the site.

The Ladysmith Lumber Co. have arranged for the erection of a new saw mill in the Nanaimo district. It will have a capacity of 35,000 feet per day.

A company is being formed in Victoria, B.C., for the manufacture of explosives. Bond and Clark, of Victoria, are putting through the organization.

A United States firm of implement manufacturers have had representatives in Guelph, Ont., looking into the advantages of that place as a site for a factory.

The Sydney Cement Co., are installing new machinery which will add materially to the output of the plant. The company are now running their plant night and day.

The British-American Bank Note Co., Limited, have opened offices in Toronto, at 701-702-703 Traders Bank Building. Mr. W. J. Valleau will be in charge of this office.

A large Wisconsin wagon company will erect a Canadian branch factory at Winnipeg, to supply what has been their export trade in Western Canada for the past three years.

The Pett Biscuit factory, of Walkerton, has been taken over by N. Ogg and J. Zinkhann. They will install new machinery and will make both biscuits and confectionery.

A St. Paul, Minn., agricultural implement firm who have enjoyed a large export trade in Western Canada in the past four years, will erect an extensive factory building at Winnipeg, Man.

The Canadian Pin Co. will locate in Chatham, Ont. They will receive a loan from the municipality of $20,000, and on their part agree to employ sixty workmen, and pay in wages $18,000 per year.

An industry will be established at North Sydney, N.S., for the preparation of smoked, dried, cured, and pickled fish. The location is well suited for such work, and there is an unlimited market for the product.

Representatives of the Borden Milk Condensing Co. have been in Tillsonburg looking over the proposed site for their Canadian company. It is expected now that the factory will be gone ahead with at once.

A wood-ware manufacturing plant will be installed by the Londonderry Iron and Mining Co., Ltd., at Colchester. Its object will be to consume the by-product of the big hardwood lumber mill at Folly Lake.

The citizens of Lachine, P.Q., have voted a bonus of $50,000 and exemption from taxation for twenty years to the Locomotive Company, who undertake to build a plant at a cost of two and a quarter million dollars.

The L. E. Waterman Co., of Canada, Ltd., manufacturers of fountain pens, etc., will erect a large factory at St. Lambert, Que. The town has granted them exemption from taxes for twenty years and a special water rate.

Winnipeg is the location selected by New York State Leather Glove and Mitten manufacturers, and a factory is to be started immediately, equipped with the latest labor-saving machinery, with a capacity of 100 dozen per day.

The Winnipeg Galvanising and Manufacturing Co. have commenced operations. Some months ago the company was formed to take over the business of the Red River Metal Co. Since then a new plant has been installed and work commenced.

The Silica Brick and Lime Co., Ltd., with works at Parson's Bridge, Vancouver Island, have increased their output materially. The company began business at the beginning of this summer, but already they are turning out double their initial production.

The Carriage Mountings Co., Ltd., have now moved their business from Toronto to their new buildings at Niagara Falls, Ont., where they have an up-to-date plant for the manufacture of Automobile and Carriage Nickel and Brass Work, and Lavatory supplies.

The buildings of Shaw & Mason, Limited, at Sydney, N.S., are nearing completion, and the pattern shop is already in operation. The plant will consist of a show-room, metal shop, tin shop, brass-finishing department, nickel-plating room, pattern shop and machine shop.

The new chapel of Assumption College, Sandwich, Ont., has just been completed by the Blonde Lumber and Manufacturing Co., of Chatham. The architectural sheet metal work on the exterior and interior of the building was done by the Metal Shingle & Siding Co., of Preston, Montreal, and Toronto.

The Bissell Carpet Sweeper Co. will move from Toronto to Niagara Falls, Ont. They have purchased a new factory building, commodious and of mill construction, which will admit of considerable expansion. The factory will be thoroughly equipped before the transfer from Toronto to Niagara Falls takes place.

The Metal Shingle and Siding Company, of Preston, Montreal, and Toronto, are now engaged in placing 6,000 square feet of skylights on the new Intercolonial R. R. Shops at Moncton, N.B. They have also just completed installing 6,000 square feet of copper skylight on the extension to the C. P. R. Angus Shops at Montreal.

Situations Wanted

NOTE.—For further particulars regarding any applicant mentioned below, apply by number to the Secretary at Toronto, stating wages, whether work will be permanent, and giving such information as you think advisable. For all help secured through this medium, our regular Labor Department charges will be made.

Brass Workers.

1 **Fitter and Turner.**—Liverpool man, married, with considerable experience on a lathe, in brass and iron work, well up in hand turning and cutting, wishes employment in his trade in Canada. Has also had some experience at steam-fitting and electrical work. Good references.

2 **Moulder.**—Young Scotchman, seven years' experience in locomotive works as a brass moulder, is anxious to come to Canada. Union man, good references.

3 **Brazier and Tube Maker.**—Young married man who has worked nine years in large band instrument makers' shops, wants position as a metal worker, brazier or tube maker in Canada. Has had long experience at brass and copper work, and can run a lathe. Is member of union not represented in Canada.

Carpenters and Joiners.

4 Young married Englishman with considerable experience as a **Shop Fitter,** and qualified to take a position as general foreman in any carpentering work, wants position in Canada. Good references, non-union.

5 Young man, single, with six years' experience in a builder's work shop, competent **Carpenter and Joiner,** wants work in Canada. Non-union, and good references.

6 **Cabinet Maker.**—Who has been working for years in London, England, with a mantel and looking-glass manufacturer, is anxious to communicate with Canadian manufacturers who can give him employment in his trade on arrival in Canada.

126 **Picture Frame Joiner.**—Young, married Englishman, with 11 years' experience in the moulding and picture frame trade at very fine work, wants position in Canada. Has worked on oak and white wood fancy mouldings and general fitting. References, non-union.

Compositors.

7 **General Letter Press Printer.**—With 20 years' experience in a first-class English office, wants position in Canada in printing office. Has knowledge of machine ruling, die stamping, office work, etc. Married, union, and excellent testimonials.

8 **Music Compositor and Monotype Operator.**—15 years' experience in American and English houses, wants position in Canada. Former union man, married, with good references.

9 **Machine Minder.**—Young man with four years' experience in printing shop as machine minder. Non-union. Would come to Canada if he could secure position at his trade.

Engineers.

10 **Engine Driver and Fitter.**—Young Englishman, married, with thorough experience with locomotive, traction engines and steam cranes, etc., wants position in Canada. Non-union, good references.

11 **Locomotive or Crane Driver.**—Young Englishman, single, with several years' experience with Great Western Railway Co., wants position in his trade in this country. Non-union.

12 **Engine Driver.**—Married Englishman coming to Canada wants position as engine driver here. Has had 14 years' experience at driving and stoking in the Old Country, and is accustomed to all kinds of engines, dynamos, etc. Non-union.

13 **Marine Engineer.**—Young Welshman, single, who has served his apprenticeship as a marine engineer, wants position at marine or any general engineering work in this country. Has had experience at repairing, improving and tool-making, and is thoroughly qualified at every branch of the trade. Excellent references. Non-union.

14 **Marine Engineer.**—Londoner, married, with long experience with marine engines and boilers on all kinds of steamships, wishes to secure employment in Canada ; is thoroughly qualified to run any engine or locomotive, and is a good, handy man with machinery of all kinds. Non-union, and splendid references.

15 **Marine Engineer.**—Young Englishman, single, with 12 years general engineering experience, 5 years with the Taff Vale Railway and 7 years' marine experince, the last two as chief engineer, would like a position in Canada. Holds a first-class Board of Trade certificate. Non-union and excellent references.

16 **Mechanical Engineer Foreman.**—Young Englishman with 8 years' experience at general engineering work, during part of which time he supervised the work of others, wants position in Canada. Would make a good handy man for any factory as a general repairer of machinery and tools. Non-union and good references.

17 **Mechanical Engineer.**—Englishman with 14 years' experience with hydraulic machinery and gas engines, and considerable general engineering experience, wants position in Canada. Has served some time as an engine erecter and millwright. Testimonials on request. Non-union.

20 **Mechanical Engineer** with 20 years' experience on all classes of engines, marine and stationary, accustomed to all kinds of work around machinery, with good testimonials, wants a position in an engineering establishment in Canada. Excellent references. Non-union.

127 **Draughtsman.**—Young, single Englishman, with 9 years' experience in first-class English machine works, who has served his apprenticeship at fitting, turning, planing, etc., in the shop, wants position in good engineering firm as draughtsman. Has a thorough practical knowledge of machinery. Non-union.

128 **Architectural Draughtsman, Surveyor,** etc.—Married Englishman, with 17 years' experience as a draughtsman and clerk of works in large English engineering and construction firms, wants position in Canada. Excellent references and a thoroughly competent man, capable of taking charge of large construction. Non-union.

143 **Engine Driver.**—Young married Englishman with eighteen years' experience at his trade with Midland Railway Co., wants position of this nature in Canada. Fully competent man. Can furnish best references. Non-union.

Electricians and Electrical Engineers.

32 **Telephone Electrician,** with 4 years' experience as a general electrician in the telephone and switch-board department of a Liverpool firm, wants position in Canada ; is competent to instruct operators and at general repair work.

33 **Scientific Instrument Maker.**—Middle-aged widower with life experience in the making of electrical instruments, and other high-grade scientific apparatus, wants position in Canada. Has some knowledge of optical instrument making, and has worked for the best English firms. Member of the Mathematical Instrument Makers' Society.

34 **Electrical Engineer.**—Young Englishman with first-class technical training, and a thorough practical experience at all kinds of electrical engineering work in the best English establishments, wants position as supervisor in large Canadian electrical engineering works. Has served as chief works assistant in good English house, and is thoroughly competent to take charge of men. Excellent testimonials.

35 **Electrical Fitter.**—Englishman with thorough knowledge of switch-board and dynamo work, wants position as an electrical fitter with a good firm in Canada, good references, thoroughly competent. Non-union.

144 **Electrical Engineer.**—Young single Englishman, with ten years experience in electrical work in all its branches, specialist on instruments, worked in best English houses, wants position in Canada. Non-union. References.

145 **Electrician.**—Young married Englishman, with ten years' experience in general electrical work, wiring, etc., a specialty, wants position in Canada. Non-union. References.

146 **Electrical Engineer.**—Young single Englishman with over ten years' experience as a general mechanic and electrician is open to take work in Canada. Non-union. Good references.

Fitters and General Mechanics.

42 **Fitter and Turner.**—Young Englishman with 7 years' experience as an engine fitter and turner in first-class English works. Good knowledge of high-grade engines, wants position in engine works in Canada. Good references. Member of Amalgamated Society of Engineers.

43 **General Fitter,** with 10 years' experience gas and waterworks, and considerable knowledge of engineering, wants position in Canada. Has worked as locksmith. German by birth, with excellent references. Non-union.

44 **General Fitter.**—Young Englishman who has served apprenticeship in good English works as engine fitter, wants position in Canada. Has a general knowledge of engineering work and repairing. Can furnish good references. Non-union.

45 **Engine Fitter.**—Englishman with 15 years' experience as engine fitter, 3 years of which were spent in Africa, wants position in large engine works and locomotive shops. Non-union. Excellent references.

46 **Engine Fitter and Turner.**—Young Englishman with good technical training and considerable experience on locomotives, having been engaged in building and erecting them in all branches, wants position in Canada. Is a thoroughly competent man, and has some knowledge of marine engines. Served his time on the Great Western Railway. Member of Amalgamated Society of Engineers. Good references.

47 **Steam Fitter.**—Middle-aged Englishman with life experience at the plumbing trade, and practical experience as a tinsmith, sheet zinc and iron worker, wants position in Canada. Was formerly a member of the British Army, serving in the Royal Engineers, during which time he was employed as foreman of works. Has certificates for building construction and levelling. Non-union. Good references.

48 **Fitter and Turner.**—Young married Englishman, with 16 years' experience as a general machine fitter and repairer, wants position in Canada. Has a thorough knowledge of textile, brewery and dyeing machinery. Would be a handy man around any factory as a general machine repairer. Non-union. Good references.

49 **Fitter.**—Young man who has served his time as fitter in a tramway company in Wales, and has a thorough knowledge of machinery, wants position in Canada. Non-union. Good references.

50 **Fitter.**—Young Englishman, married, intending emigrant to Canada, wants position as steam fitter in this country ; total abstainer ; industrious and willing.

51 **Plumber and Sanitary Engineer.**—Middle-aged Englishman, married, with 26 years' experience at the plumbing trade, would come to Canada if he can secure position. Non-union. Good references and a thorough knowledge of his trade.

140 **Factory Mechanic.**—Young married Englishman, with thirteen years' experience as general mechanic in English factory, wants position in Canada. Reference. Non-union.

Machinists.

52 **Milling Machinist.**—Young Englishman with 8 years' experience as milling machinist, with good English firms, wants position in Canada. References. Member of the Amalgamated Society of Engineers.

53 **Machinist.**—Young married Englishman with 16 years' experience in engine works at slotting, planing and drilling machines, wants position in Canada. Union man.

54 **Telegraph Machinist.**—Young man with 4 years' experience in the Government telegraph works at repairing apparatus in the stores department, wants position in Canada. Good references. Member of the Stores' Association, G.P.O., England.

55 **Machinist.**—Married Englishman with 17 years' experience in the British naval dock yards at milling, shaping, boring, drilling and screwing, is anxious to come to Canada if he can secure a position in his trade. Can secure good references. Non-union.

56 **Shaper and Planer.**—Young married man with 18 years' experience at his trade in good English works, wants position as shaper and planer in Canadian machine shop. Union man and can secure good references.

57 **Hand Miller.**—Young married Englishman with 14 years' experience at his trade, who has worked all classes of milling machines, horizontal and vertical profiling and slot drilling, with some experience at fitting, wants to come to Canada if he can secure work at his trade. Has references. Union man.

58 **Roll Turner.**—Young married Englishman with 20 years' experience as round turner in large iron works in England, who has served 7 years as head foreman in rolling mills, would come to Canada if he can secure good position. Non-union. References.

59 **Scale Fitter.**—Young Englishman with 12 years' experience as scale and weighing machine fitter, with some years' experence at the bench, wants position in Canada. Non-union.

60 **Metal Polisher and Nickel Plater.**—Young Londoner with 4 years' experience at his trade, working on bicycle parts and brass fittings for phonographs, would come to Canada if he could secure work. Non-union. References.

61 **Galvanized Sheet Iron Worker.**—Englishman, married, with life experience as a maker of galvanized iron goods, such as buckets, baths, water cans, etc., would come to Canada if he can secure position at his trade. Good references, sober and industrious. Some knowledge of the windmill business.

63 **Iron and Steel Sheet Roller.**—Middle-aged Englishman, married, with 20 years' experience in large English mills, accustomed to wide and narrow rolling of all thicknesses, wants position as sheet roller in Canada. Non-union. References.

141 **General Machinist and Blacksmith.**—Young English mechanic, with some years experience as a machine tool smith and general mechanic, would migrate to Canada if he could get work. References.

124 **Linen and Cotton Handkerchief Warehouseman.**—Young, single Englishman, with 9 years' experience in large linen and cotton warehouse in Manchester, in the handkerchief branch, wants position as shipping clerk in Canadian house. Non-union.

105 **Clay Moulder.**—Young man, married, with 8 years' experience as a chimney-top maker, and a thorough knowledge of the clay moulding and glazing business, wants position in Canada. Has also a knowledge of brick making. Good references. Non-union.

106 **Cloth Looker.**—Young married Englishman, with 16 years' experience in the employ of a bed quilt manufacturer, well versed in all that pertains to the woollen and cotton business, wants position in a Canadian factory or warehouse in his line. Good references. Non-union.

Miscellaneous.

70 **Accountant for Ship Yard.**—A competent accountant and bookkeeper, with good testimonials and long experience in large ship and engine building and repairing works in Great Britain, seeks similar work in a large Canadian establishment.

71 **Brick Maker.**—Englishman, married, with life-long experience in the manufacture of machine and hand-made bricks and tiles, is anxious to secure work in a brick and tile factory in this country. Is accustomed to repairing brick making machinery and running engines. Has first-class references and has made a successful invention in bricking apparatus.

72 **Brick Maker or Manager for Brick Works.**—Competent man, 19 years' experience as a brick works manager and engineer in England; 40 years of age. Is anxious to secure similar position in Canada. A good, all-round man, well recommended.

73 **Bridge Plater.**—Scotchman, with 16 years' experience in all classes of bridge and structural steel work, with the best Old Country firms. Will pay his own passage to Canada if he can secure work at his trade on arrival. Can take position as foreman, and has splendid references.

74 **Brewery Worker.**—Englishman, 10 years' experience as a tun room and copperside man in the best English breweries, is anxious to secure work at his trade in Canada. Can do any general work around a brewery, and will furnish references on request.

75 **Boot and Shoe Trade.**—Young Englishman, with 8 years' experience in a boot and shoe factory in England, sober and industrious, wants position as a clicker and pattern cutter in a Canadian shoe factory. Has worked on both men's and women's shoes. First-class references.

128 **Boot and Shoe Worker.**—Young married Englishman, with nine years' experience as a clicker, and considerable general business experience in South Africa and England, would like position in Canada. References. Non-union.

129 **Iron and Steel Dresser.**—Young single Englishman, seven years' experience at trade with best Sheffield firms, wants position in Canada in metal trade. Non-union.

130 **Weigh Clerk in Colliery.**—Young single Englishman with seven years' experience in above capacity in English colliery, wants similar position in Canada. Non-union. References.

131 **Textile Designer.**—Young single Englishman with seven years experience as a designer of patterns for table-cloths, etc., and general mill experience, wants position of this kind in Canada. References excellent. A good man.

132 **Technical Chemist.**—Young single Englishman, with ten years' experience, wants position as chemist in good firm in Canada. Non-union. References.

133 **Worsted Overlooker.**—Young married Englishman, with fifteen years' experience in woollen factory, complete knowledge of all branches of trade, wants position as overlooker in cloth factory. Union man. Four years as foreman of works. References.

134 **Fancy Worsted Cloth Designer.**—Young single Englishman, with three years' experience as designer, wants similar work in Canada. References. Non-union.

135 **Metal Polisher.**—Young married Englishman, with fourteen years' experience as iron and brass polisher in good English factories, chiefly on electric car work, wants position in Canada. Non-union. References.

136 **Mineral Waterworks Manager.**—Young married Englishman, with over ten years' experience in above capacity, and considerable general experience with all kinds of machinery, dynamos, etc., wants position in Canada. Non-union. Good references.

137 **Leather Worker.**—Young Englishman, with some experience as a leather worker, would come to Canada if he could secure work at his trade.

138 **Upholsterer.**—Middle-aged married Englishman, with life-long experience at his trade, wants position in Canada. Good references. Non-union.

139 **Gardener and Cook.**—Middle-aged Englishman and his wife, desirous of emigrating to Canada, would be glad to work for some Canadian manufacturer. Husband is a good gardener and handy man either around a residence or factory, wife an excellent cook and laundress. Excellent testimonials, and seem altogether a desirable couple.

76 **Cheesemaker.**—Englishman, with thorough knowledge of the cheese-making business in England, wants to come out to Canada and obtain employment in his trade in this country. References on request.

77 **Architect.**—Young Englishman, with 10 years' experience at drafting and general surveying work in Kimberley, South Africa, wants position in Canada. Non-union. Splendid testimonials.

78 **Paper Warehouseman.**—Young Londoner, with 6 years' experience as warehouseman, in large London firm of paper dealers, well up in all lines of paper, wants position in Canada. Good references. Non-union.

79 **Clothing Warehouseman.**—Young Scotchman, with 7 years' experience in shipping department of a large Glasgow wholesale clothing house, well up in checking, measuring, etc., classing and testing yarns, wants position in Canada. Non-union. Good references.

80 **Dyer.**—Young married Englishman, with 16 years' experience as foreman dyer of pieces, wool and rags; 22 years in the employ of one firm, wants to come to Canada if he can secure similar work. Non-union and first-class testimonials.

81 **Bleacher and Dyer.**—Young married Englishman, now residing in Portugal, with 16 years' experience in dyeing works, and a thorough knowledge of dyeing and bleaching in all its branches, has been in charge of the finishing and shipping room at the Oporto branch of a large English firm for some years, and is fully qualified in every particular. Good references. Non-union.

82 **Analytical Chemist.**—Young man with thorough technical training, graduate of a German technical institute, speaking French, German and English, wants position in Canada as analytical chemist or engineer. Member of the Society of Chemical Industry, and first-class recommendations.

89 **Lithographer.**—Young, single Englishman, with 8 years' experience in a prominent London house at his trade, and two years' experience in Canada, wants position here. Not a union man at present. References.

90 **Locomotive Fireman.**—Young Englishman, with 7 years' experience as locomotive fireman, will come to Canada if he can secure similar work. Non-union. References.

91 **Mill Board Maker.**—Middle-aged, married Englishman, with over 20 years' experience as a mill board manufacturer, 9 years as fireman of works, wants position in Canada. Non-union. Excellent references.

92 **Photographer.**—Young married Englishman, with 15 years' experience in England and America in all branches of the photographic business, specialist on commercial publishing and engineering work, wants position in Canada. Can do excellent work, will furnish samples and testimonials. Non-union. Has been in business for himself.

93 **Colotype Plate Maker and Overseer.**—Young, single Englishman, with 12 years' experience in photographic work, thorough knowledge of collotype printing and post-card publishing, wants position in Canada. Has been overseer of printing departments for 5 years. Non-union. Good testimonials

94 **French Polisher.**—Middle-aged London man, with 15 years' experience in all branches of the polishing trade, will come to Canada as French polisher, if position assured.

95 **Glass Painter and Decorator.**—Young single Englishman, with 15 years' experience in the business English houses as a glass painter, embosser and decorator, wants position of a similar nature in Canada. Has done some of the business work in London. Non-union. References.

96 **Timber Sawyer.**—Young married Londoner, with 12 years' experience as a timber sawyer in London and Australia, would come to Canada if position is assured in his trade. Non-union. References. Wants passage advanced on security of life policy.

97 **Wool Sorter.**—Young married Scotchman, with 21 years' experience in the wood business as classer, sorter and blender, both at home and in the colonies, would come to Canada if employment assured in his trade ; can take position as manager. Non-union. References.

98 **Soap Maker.**—Dublin man, anxious to come to Canada, wants position as soap maker. Has had good practical experience and can do all kinds of work.

99 **Ship Builder.**—Middle-aged Scotch ship builder, who has come through the various branches of ship-building and repairing, been manager of yards for 20 years, wants position in Canada in shipyards. Can look after men, or would start upon his own account if assisted. Non-union. Excellent testimonials.

100 **Blanket Manufacturer.**—North of England blanket manufacturer, who has run his own plant for a number of years, would like to obtain employment as a manager or foreman in a Canadian blanket house. Knows the trade from the raw material to the finished product, and is experienced in extracting wool for fine goods.

101 **Basket Maker.**—Edinburgh willow basket maker, intending emigrant to this country, wishes to obtain a responsible position with a good basket manufacturer. Is a specialist on spale work, and would be glad to start a factory of his own if assisted with some capital.

102 **Bookbinder.**—London man, with 5 years' experience at bookbinding, with a well-known London house, competent in all branches of binding, is anxious to secure work at his trade in Canada. Union. References.

103 **Chemical Maker.**—Young married Englishman, with 10 years' experience in the manufacture of nitric and hydro-chloric acid, ammonia and similar products, is anxious to come to Canada if he can secure work at his trade. Excellent references. Non-union. Will be ready to go out about the middle of July.

104 **Color and Paint Maker.**—Young London man, single, 14 years in the employment of one firm, is anxious to secure work in a paint manufactory in Canada. Is well qualified to make all kinds of colors and has a thorough experience. Non-union. Good references.

Printer and Compositors.

107 **News Jobbing.**—Compositor, with some experience on stone imposition, with good English firms, wants position at his trade in this country. Non-union. First-class references.

108 **News and Jobbing.**—Man, with some experience on Linotype matter make-up, and stone work in good English houses, wants position in Canada. References. Young, married, and non-union.

147 **Litho Tinplate Printer.**—Young married Englishman, with eighteen years' experience at his trade, would come to Canada if he could secure similar work here. Non-union. Excellent references. Samples of work, e.g., ash-trays, waiters, trays, etc., on request.

148 **Compositor.**—Young single Englishman, with fourteen years' experience at his trade in good English shops, wants position in Canada. Non-union. Good references. Good at display work.

Smiths.

109 **Drill Blacksmith.**—Young, single Englishman, with 10 years' experience as drill blacksmith in Birmingham waterworks, wants position in Canada at his trade. Non-union. Good references.

110 **Shoeing and General Smith.**—Middle-aged married man, with 27 years' experience as a general blacksmith, registered and accustomed to every branch of smith work and repair, would come to Canada if he can secure position.

111 **General Smith.**—Young man, with 7 years' experience as an angle, ship, and engine smith in the Portsmouth dock-yards, wants position in Canada. He is a fully qualified journeyman, has good references. Union man.

Trade Enquiries

NOTE.—For further information regarding any inquiry mentioned under this heading or the names of inquiries, apply by numbers to the Secretary, at Toronto.

183 **Agent.**—Well-known **Zwolle, Netherlands,** wholesale merchant, and commission agent with wide connections in Holland, Belgium, Austria and Germany, is anxious to represent reliable Canadian exporters in any lines. Good references.

184 **Agent—Dublin, Ireland,** firm of commission agents with wide connections in Great Britain, and the Colonies, is anxious to hear from Canadian houses open to appoint representatives for canned and preserved fruits, cereals, etc., and good openings for business.

185 **Agents.**—Firm of wholesale commission agents in **Brussels, Belgium,** is open to act as exclusive agents for Canadian exporters of any lines except heavy machinery. Splendid connections and good references.

186 **Agent.**—Well-known **Paris, France,** commission agent would be glad to act as representative for reliable Canadian firms seeking to develop export business in France. First class references.

187 **Asbestos Goods.**—Inquiry is made for actual Canadian manufacturers of asbestos goods by a **Hull** firm of importers.

188 **Basswood Boards.—London, England** firm is in the market to purchase basswood boards suitable for piano making. Representative of firm will shortly be in Canada, and will be pleased to call on any firms interested.

189 **Beans and Peas.—Havana, Cuba,** firm of general merchants are open to purchase beans, white marrow and kidney, red kidney, lima, and peas, also fancy and staple groceries from first class Canadian exporters.

190 **Building or Architectural Specialty.**—An influential firm which has been established to push the sale of Canadian manufactured goods in a large industrial centre, desires to hear from any firms producing a specialty suitable for the building, architectural or other trades, who may be anxious to open up an export trade with Great Britain.

191 **Birch Lumber.**—A **Cape Town** firm of wholesale furniture dealers, who are also manufacturers of furniture, desire to be placed in touch with Canadian exporters of birch lumber, in lengths from 12 feet to 17 feet, thickness from 3 inches to 4 inches, widths from 6 inches to 18 inches.

192 **Broom Handles.**—A firm in **Dublin** wishes to purchase supplies of broom handles, and invites quotations from Canadian manufacturers who can fill orders.

193 **Buggy, Axles and Springs, Woodenware, Hoods, Ironmongery, Electric Car Fittings.**—Old established **South Australian** firm of carriage

194 **Butter Factory Machinery and Supplies.—Alberta, Canada,** firm just starting in business are in the market to purchase machinery suitable for their plant.

195 **Canned Goods**—An old-established product firm in the north of **England** is open to hear from a Canadian firm desirous of opening up trade in canned fish, fruits or other canned goods.

196 **Canned Salmon.**—A **Manchester** firm asks for prices of best quality Fraser River canned salmon from Canadian exporters.

197 **Cloth Cutting Machines.**—Old established firm is in the market to purchase cloth cutting machines.

198 **Condensed Milk.**—A large **Cape Town** firm of wholesale general merchants desires to communicate with Canadian exporters of condensed milk.

199 **Chair Legs and Spindles.**—A **Liverpool** firm invites correspondence from Canadian manufacturers of chair legs and spindles.

200 **Desks.**—A **London** firm is desirous of getting into touch with some Canadian manufacturers of desks who wish to be represented in the United Kingdom.

201 **Desks.**—Another firm in **London** wishes to import desks from the Dominion.

202 **Duck, Wool and Webbings suitable for Horse Blankets.**—Canadian harness firm is open to purchase quotations of this material in Canada.

203 **Evaporated Apples, Canned Goods, Etc.**—A **French** importer, at present in **Montreal**, having an office in Paris, desires to be placed in touch with Canadian producers of evaporated apples, canned salmon, canned lobsters, fluid beef, bacon and hams, and other food products, wishing to export to France.

204 **Excelsior Packing.**—A firm of fruit shippers in the **Channel Islands** is open to purchase supplies of several grades of suitable excelsior packing, and would be pleased to receive quotations from Canadian manufacturers.

205 **Flour, Oats, Peas, Straw Brooms, Soaps, Pork Products.**—Old established wholesale firm of provision and commission merchants in **Port of Spain, Trinidad**, are in the market to purchase considerable quantities of the above articles. Excellent references, and will pay cash on receipt of goods.

206 **Furniture.**—A **Cape Town** firm of wholesale and retail furniture dealers desires to correspond with Canadian exporters of furniture, especially those engaged in the manufacture of the ordinary household chair.

207 **Gall-Stone.**—An importing and exporting firm in **Japan** inquires for gall-stone in Canada, and invites the attention of exporters, also of packing houses, butchers, and others. Samples sent forward will receive immediate attention.

208 **Gasoline Launches and Boats.**—**Durham, South Africa,** is open to act as agent for Canadian manufacturers of gasoline launches, boats, etc. There is a good demand for launches in South Africa, and the bulk of those now being sold are of United States manufacture. There is no reason why these should not come from Canada.

209 **Hardwood Doors.**—A large **South African** wholesale firm of timber merchants and building contractors desire to get into communication with Canadian manufacturers of hardwood doors made from ash or black walnut, etc., plain and raised panel, and built-up veneer. Quotations for these doors f.o.b. Montreal or St. John, New Brunswick, requested.

210 **Hides.**—Inquiry is made by a **North of England** firm for Canadian exporters of all kinds of hides.

211 **House Furniture.**—A **Manchester** firm will welcome catalogues and price lists of general house furniture from Canadian manufacturers.

212 **Lard.**—A **Cape Town** firm of wholesale general merchants, desire to be placed in touch with Canadian manufacturers and exporters of lard in large quantities.

213 **Manufacturers' Representative.**—**Manila, Philippine Islands,** manufacturers' agent is coming to Canada to secure additional lines to handle in the Islands. Canadian firms interested in this trade will kindly forward their names to this office when they will be referred to the party inquiring, who will call on them when he arrives in the country.

214 **Manufacturers' Agents.**—Well-known **London, England,** firm of manufacturers' agents with splendid connection in Great Britain among the electrical and mechanical engineering firms and allied trade would be willing to act as British representative for a prominent Canadian firm in this or

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kindred lines. Will act as exclusive agents for such a firm as desired and terms right. References.

215 **Machine Tools and Electrical Engineering Equipment.**—First class **Osaka, Japan,** machinery house will act as sole agents for Japan for Canadian firms making this class of machinery. They now represent a first class Canadian firm in another line who will testify as to their reliability.

216 **Manufactured Wood Goods.**—Inquiry is made for **Canadian** exporters of doors, windows, broom handles, and similar manufactured wood goods, by a Northumberland firm.

217 **Maple Flooring Blocks.—London, England,** company engaged in the flooring industry are open to purchase large quantities of these blocks from Canadian manufacturers.

218 **Mosaic Wooden Block, Imitation.**—A **Newcastle-on-Tyne** firm inquires into the prospects of securing imitation mosaic wooden blocks for flooring purposes, and invites correspondence from Canadian firms interested.

219 **Paper.**—A **London** firm wishes to get into touch with Canadian manufacturers who can supply roll news paper suitable for the South African market.

220 **Pine Doors.**—A large **South African** wholesale firm of timber merchants and building contractors desire to get into communication with Canadian manufacturers of pine doors, the dimensions of which can be obtained by correspondents requesting the address of this inquiry.

221 **Pick Handles.**—Important Sheffield firm can take large quantities of pick handles.

222 **Pick Handles.**—Well-known **South Yorkshire** firm which uses a considerable quantity of pick handles, and which firm is also in a position to secure a large demand from other sources, cordially invites correspondence from any Canadian manufacturer. A substantial trade can be done, as there is a strong preference for Canadian-made handles.

223 **Pine Deal Ends.**—An important inquiry is made by a **Leeds** firm for actual Canadian exporters of pine deal ends measuring 3 feet to 5 feet long of the very best quality.

224 **Peas.**—A large **Cape Town** firm of wholesale general merchants desire to be placed in communication with Canadian exporters of split and green peas.

225 **Pitch Pine.**—A **German** firm desires to get into communication with a Canadian lumbering firm able to ship large quantities of sawn pitch-pine.

226 **Pneumatic Horse Collar.**—An **Australian** with a patent pneumatic horse collar wishes to hear from Canadian harness manufacturers who would be interested in manufacturing under his patent. This article is selling well in Australia and Great Britain. Further particulars and literature at this office.

227 **Rolled Oats.**—A firm in **Finland** asks for prices of rolled oats from Canadian manufacturers.

228 **Sisal Ropes.**—A **North of England** firm asks for Canadian manufacturers of sisal ropes.

229 **Sheep Skins with the Wool On.**—A manufacturers' agency in **London, England,** desires to hear from Canadian tanners of skins of this description. Good business in sight.

230 **Skins.**—Well-known and old established **Hull** firm are extensive purchasers of sheep skins, hides, calf skins, etc., and desire to open up trade relations with Canadian exporters.

231 **Split Legging Leather.**—A firm in the **Midlands** with branch in Manchester asks for prices of split legging leather from Canadian manufacturers.

232 **Split Legging Leather.**—A **London** firm asks for prices of split legging leather from Canadian manufacturer.

235 **Timber.**—A well-known firm of timber brokers in the **North of England** will be interested in corresponding with Canadian shippers (not represented) of yellow pine, birch, planks, oak scantlings, whitewood, etc.



You cannot roof for less money and save money—nor for more money and spend the money so wisely—than you do when you choose the perfected steel shingle which anybody can put on right with the simplest tools.

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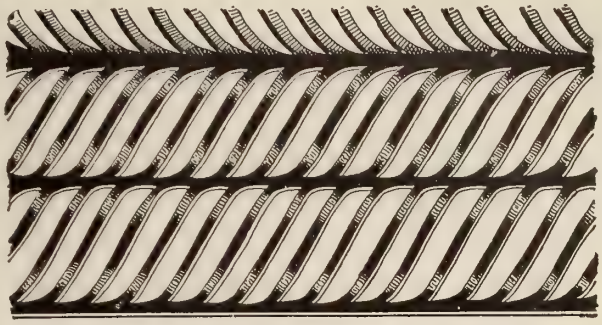
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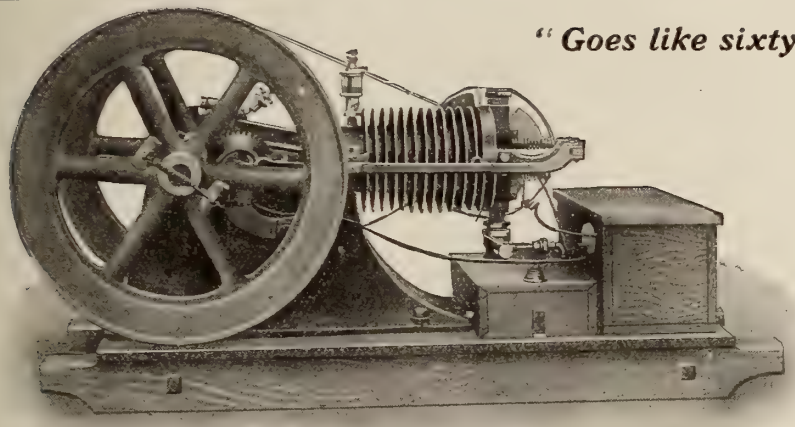
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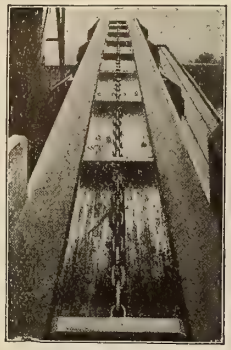
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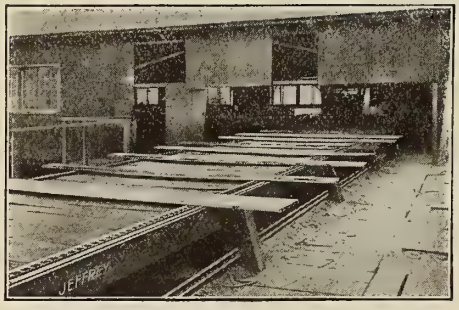
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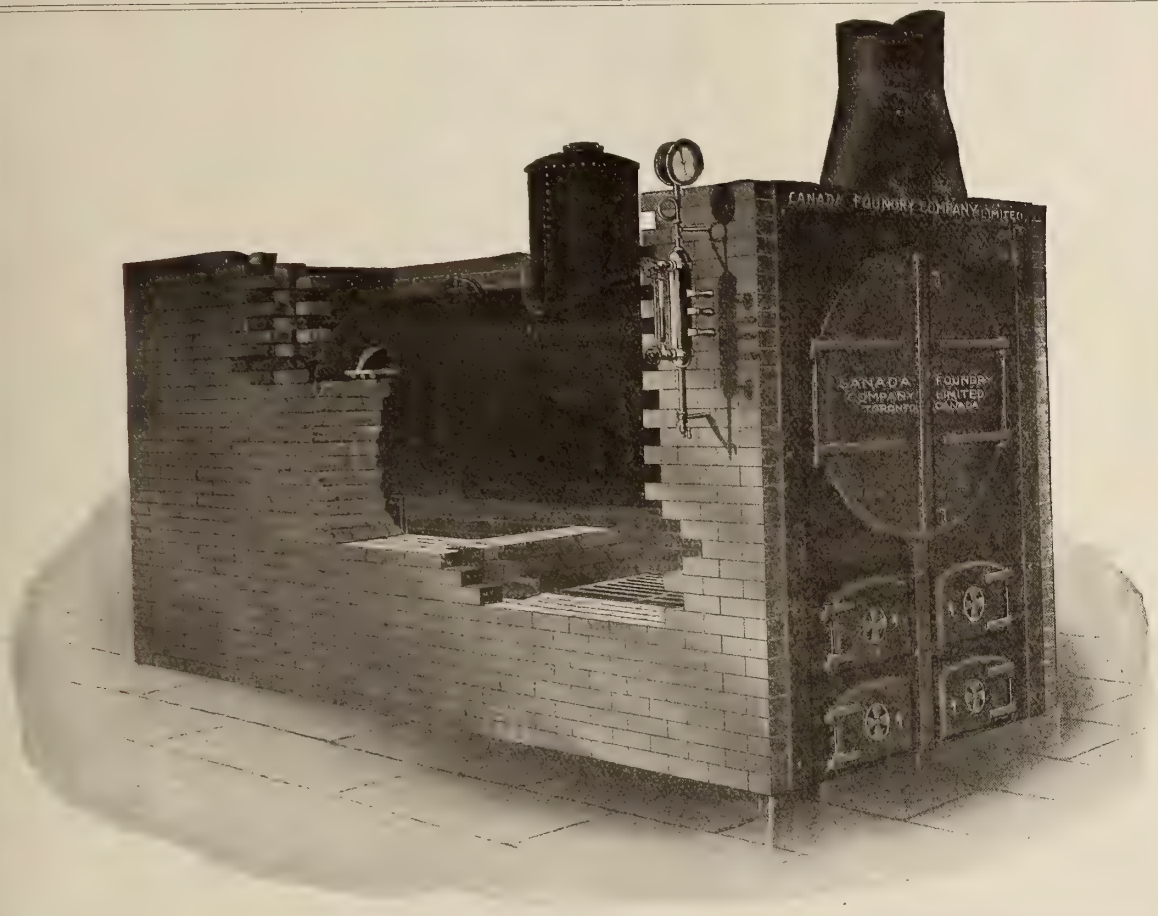
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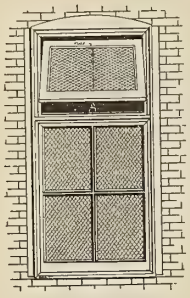
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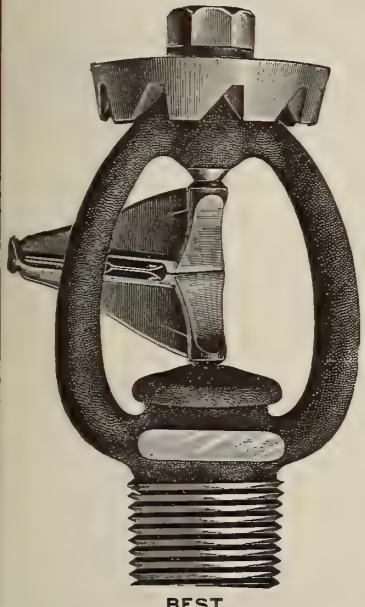
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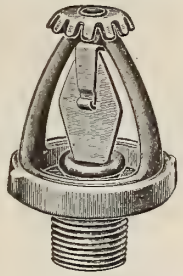
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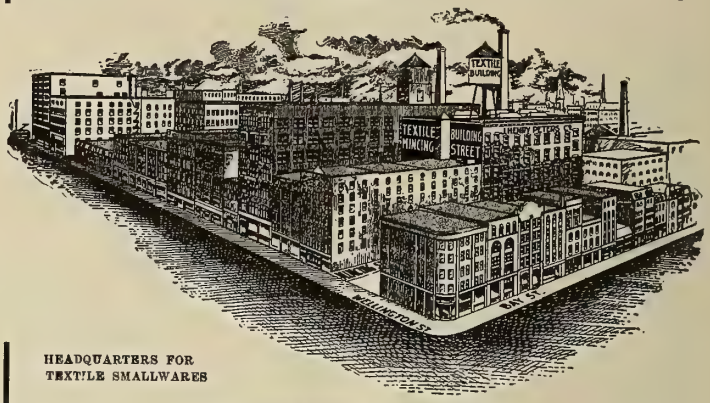
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Linseed, Cotton Seed, Olive and Castor Oils; Neatsfoot, Sperm, Seal, Whale and Cod Oils; also Mineral Oils and Greases of all sorts.

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ESTABLISHED 1875.
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Hamilton Radiators for Hot Water or Steam.

Catalogue on application.

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Prices on application.

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Steel Commercial Trunks a specialty.

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Trunks and Travelling Bags, Telescope Cases, Suit Cases, etc. Steel Sample Cases.

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Manufacturers of
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The WILKINSON PLOUGH CO., Ltd.,
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The West Lorne Wagon Co. controlled by The Wilkinson Plough Co., Ltd.
Prices on application.

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Manufacturers of
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Galvanized Steel Pumping and Power Windmills, Gas and Gasoline Engines, Grain Grinders, Iron and Wood Pumps, Tanks, Water Supplies, Custom Galvanizing.
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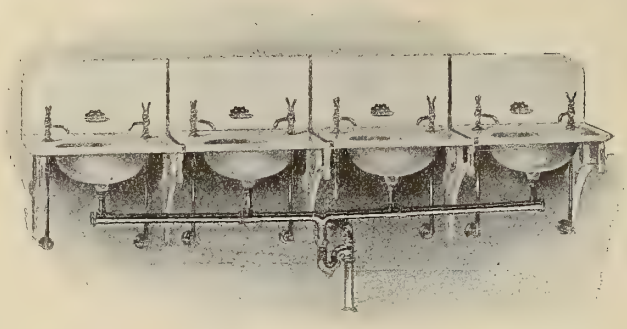
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WINNIPEG: 156 Lombard Street

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Business Office and Works: TRAIL, BRITISH COLUMBIA

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COPPER MATTE, BLUESTONE, LEAD PIPE, ANTIMONY

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PIG LEAD

Trail Brand--The Purest Produced Anywhere

(ANALYZES 99.995% PURE)

Executive Council

OCTOBER MEETING.

The regular monthly meeting of the Executive Council was held in the Council Chamber of the Board of Trade Building, Toronto, on Thursday, October 7th, at 2 p.m.

The President, Hon. J. D. Rolland, occupied the chair, and there were also present: Messrs. G. Frank Beer, Toronto; P. H. Burton, Toronto; H. Cockshutt, Brantford; J. A Coulter, Ingersoll; J. W. Cowan, Toronto; W. R. Dunn, Hamilton; L. V. Dusseau, Toronto; J. F. Ellis, Toronto; P. W. Ellis, Toronto; John Firstbrook, Toronto; Atwell Fleming, Toronto; W. M. Gartshore, London; Jas. Goldie, Guelph; W. P. Gundy, Toronto; S. Harris, Toronto; S. R. Hart, Toronto; E. G. Henderson, Windsor; R. Hobson, Hamilton; A. Jephcott, Toronto; J. S. McKinnon, Toronto; R. McLaughlin, Oshawa; J. B. MacLean, Toronto; Denis Murphy, Ottawa; J. P. Murray, Toronto; W. C. Phillips, Toronto; J. Ransford, Clinton; W. H. Rowley, Ottawa; Wm. Stone, Toronto; T. H. Smallman, London; Chas. A. Smart, Montreal; H. Stroud, Paris; Arnold W. Thomas, Toronto; J. O. Thorn, Toronto; W. B. Tindall, Toronto; S. M. Wickett, Toronto; D. Wilson, Collingwood.

The minutes of the August meeting, as published in INDUSTRIAL CANADA, were taken as read.

Communications.

Communications were received as follows:

(*a*) From the following members of the Executive Council, regretting their inability to be present: Messrs. Wm. Smaill, Montreal; T. H. Estabrooks, St. John; S. W. Ewing, Montreal; J. J. McGill, Montreal; Geo. Booth, Toronto; Robt. Munro, Montreal; John M. Taylor, Guelph; C. R. McCullough, Hamilton; C. R. H. Warnock, Galt; Wm. Robins, Walkerville; C. H. Waterous, Brantford; J. S. N. Dougall, Montreal; Jas. McLauchlan, Owen Sound; Arthur W. White, London.

(b) From Mr. Alex. Maclaren, of Buckingham, Que., regretting his inability to serve on the Executive Council, and suggesting that he be replaced by his son. Referred to the British Columbia Branch for report.

(*c*) From the National Municipal League, inviting the Association to be represented at their annual meeting, to be held in Providence, Rhode Island, November 19th to 22nd. Referred to the Reception and Membership Committee, with power to act.

(*d*) From the National Civil Service Reform League, inviting the Association to be represented at its annual meeting, to be held in Buffalo, November 7th and 8th. The Secretary was instructed to send the Association's regrets.

(*e*) From the Ontario Association of Architects, inviting the members of the Association to attend an exhibition of competitive drawings for the new Justice and Departmental Buildings at Ottawa. The Secretary was directed to acknowledge the receipt of this invitation with thanks.

Election of Officers.

Messrs. W. B. Tindall, A. W. Thomas and John Firstbrook were appointed members of the Finance Committee for the current year.

The officers of the Association then reported as follows:

PRESIDENT.

Hon. Mr. Rolland took occasion to thank the members in attendance at the first meeting of the Executive Council for the honor they had done him in electing him to the Presidency, assuring them that he would approach the duties of his office conscientiously, and endeavor to see that the policy of the Association, as laid down by the Council from month to month, was carried out. He stated that he had already found out that by no means the least of his duties were the social functions he was required to attend, and in this connection he reported a visit he had paid the Quebec Branch on the occasion of a banquet in honor of their former Chairman, Mr. Vandry.

TREASURER.

In the absence of the Treasurer, the Secretary read his report for the month ending September 30th. It showed receipts of $4,235.37, and disbursements of $3,585.18, with a balance at the bank of $16,305.42. On motion, the report was adopted.

DELEGATE TO BATTLE CREEK CONVENTION.

Mr J. P. Murray reported on behalf of those who had attended the annual convention of the Citizens' Industrial Association at Battle Creek, on October 7th and 8th. He outlined the objects of the Association and mentioned a number of the practical results it was accomplishing in the cause of industrial peace. His report also dealt with the cost of membership in the Association, and recommended that a synopsis of some of the papers read at the meeting be published in INDUSTRIAL CANADA.

As the report concluded with a recommendation that an invitation be sent the Citizens' Industrial Association to hold their next year's meeting in Toronto, it was decided to refer the whole report to the Reception and Membership Committee.

FINANCE.

The report of the Finance Committee, read by the Vice-Chairman, Mr. W. B. Tindall, recommended for payment the accounts of the month, amounting in all to $2,325.57. It endorsed the application of the Eastern Canada Manufacturers' Mutual Fire Insurance Co. for temporary accommodation in the Montreal office, providing such an arrangement met with the approval of the Montreal Branch. It also recommended that the request of the Montreal Branch to have its Contingent Fund increased from $25 to $100 be granted.

The report further stated that the Association's arrangement with its Auditor called only for an annual audit. In the opinion of the Committee the receipts and expenditure were now of a size to make it desirable to have a continuous audit, and it was recommended accordingly that they be authorized to make an arrangement to this effect. The adoption of the report, moved by Mr. Tindall, seconded by Col. Gartshore, was carried.

"INDUSTRIAL CANADA."

In the absence of the Chairman, Mr. John Firstbrook read the report of the above Committee, which showed that the paper's financial progress was being well sustained, the net surplus for two months ending September being $510.41, while the cash balance for the same period was $924.50.

The Committee reported that it accepted with regret the resignation of Mr. B. L. Anderson, who had been appointed Secretary of the Central Canada Manufacturers' Mutual Fire Insurance Co., and stated that immediate steps would be taken to procure a successor for him on the advertising work. The report recommended that Mr. Megan be sent to Montreal for the two weeks beginning November 10th to relieve Mr. Cameron, it being desirable in the interests of the paper that he should meet as many of the members and become as widely acquainted with industrial conditions as possible.

The Committee again raised the question of procuring expert editorial assistance for INDUSTRIAL CANADA. It was felt that such a policy must immediately result in good to the Association and bring about a more liberal patronage of the paper's advertising columns. The report recommended that an appropriation equal to one-half of last year's surplus be set apart for this purpose.

Following the resignation of Mr. J. S. N. Dougall, of Montreal, it was mentioned that Mr. H. T. Reason, of London, and Mr. H. G. Nicholls, of Toronto, had been invited to join the committee.

The adoption of the report moved by Mr. Firstbrook, seconded by Mr. Beer, was carried.

RECEPTION AND MEMBERSHIP.

The report of the Reception and Membership Committee, presented by Mr. G. Frank Beer, recommended for acceptance the following applications for membership:

New Members.

ATWOOD, ONT.

Western Ontario Portland Cement Co.—Portland Cement.

BELLEVILLE, ONT.

Lehigh Portland Cement Co., Ltd.—Portland Cement.

BRANTFORD, ONT.

T. J. Fair & Co., Limited—Cigars.

GUELPH, ONT.

Gilson Mfg. Co., Ltd.—Gas engines, implements, specialties, etc.

MONTREAL, QUE.

G. C. Hanford Mfg. Co.—Proprietary medicines.

TORONTO, ONT.

The Gendron Mfg. Co., Limited—(Chas. Rochereau de la Sabliere, 2nd member).

The Indestructible Brick, Limited—Sandstone bricks.

Toronto Lithographing Co., Ltd.—(F. W. Stone, 2nd member).

Warwick Bros. & Rutter—(George R. Warwick, 2nd member).

WESTON, ONT.

The Moffat Stove Co., Ltd.—(F. W. Moffat, 2nd member).

WINDSOR, ONT.

Windsor Boiler Works—Steam boilers.

In deference to the wishes of the Montreal members for an early decision regarding the place of next year's Annual Meeting, it was recommended that it now be settled that the Convention be held in Montreal.

The report further stated that in the opinion of the Committee it would be advisable to accept the invitation of the Ottawa members to hold the December meeting of the Executive Council in that city, but in order to avoid any conflict with holiday business, it was suggested that the first, instead of the third, Thursday would be a more suitable date.

Commenting on the application of the Toronto Branch for an appropriation of $200 to entertain the British Cotton Spinners, the Committee stated that in view of the precedent involved it might lead the Association into considerable expense on subsequent occasions, and they preferred to have the matter dealt with by the Council.

The Committee also intimated its intention to arrange for a series of local dinners in different parts of the country during the winter, a programme of which would be submitted for approval at a later meeting.

The adoption of the report, moved by Mr. Beer, seconded by Mr. Dusseau, was carried, and after some discussion a subsequent motion by Messrs. McLaughlin and Firstbrook to vote the sum of $200 for the entertainment of the cotton spinners was also carried.

PARLIAMENTARY.

The report of the Parliamentary Committee, presented by Mr. J. O. Thorn, read in part as follows:

Scarcity of Labor.

Reports having reached the Committee that the Government was considering amending its immigration regulations so as to make it necessary for the immigrant to be possessed of a certain amount of money before being admitted, and the statement having been made that the Trades and Labor Congress would send a representative to England to discourage the emigration of further skilled help from the United Kingdom to Canada, your Committee is of the opinion that steps should be taken to urge upon the Government more forcibly than ever before the importance of altering their present immigration policy. Numerous instances were made known to the Committee where valuable machinery had been imported and duty paid thereon, only to find that it must lie in idleness by reason of the lack of the necessary staff of operators to man it. Your Committee accordingly recommends that the Secretary be instructed to procure periodically throughout the year statistics regarding the scarcity of labor in the various trades, and to bring these statistics to the attention of the Government, with a view to seeing if they cannot be induced thereby to alter their policy.

United States Silver.

Following the recommendation contained in the report of this Committee to the Annual Meeting, a letter has been sent to the Minister of Finance, expressing the hope that at the approaching session an appropriation will be made for the purpose of continuing the arrangement formerly in effect between the Government and the Bankers' Association for the deportation of United States silver coins circulating in Canada.

Provincial Laws Regarding Liens.

The receipt of a communication from a member of the Association asking for details regarding the requirements of Quebec and the Maritime Provinces in the matter of liens on machinery suggested to your Committee the advisability of having on file in the Association offices, for the information of all members, a resumé of the various Provincial statutes so far as they have to deal with liens on any class of merchandize. It is felt, however, that this matter is rather one for the Commercial Intelligence Committee to deal with, and in turning it over to that Committee your Parliamentary Committee wishes to record its opinion that the matter is one of importance.

Workingmen's Compensation.

In view of the likelihood of early action by the Governments both of Ontario and Quebec in the matter of a new law providing compulsory compensation for workingmen injured in factories, your Committee proposes to call a special meeting in the near future for the purpose of discussing the question in all its phases with the idea of arriving at a draft bill which might be considered by the various Provincial Legislatures. In the meantime the Committee would be glad to have authority from the Council to engage legal assistance in the preparation of such a bill. The Secretary has been instructed to secure copies of such Acts from all possible sources.

Ottawa Representative.

It will become necessary for the Association at an early date to decide whether or not it wishes to be represented at Ottawa during the approaching session, and your Committee would recommend that it be empowered to co-operate with the Finance Committee in making such an arrangement as will be mutually satisfactory.

The adoption of the report was moved by Mr. Thorn, seconded by Mr. Fleming.

Speaking on the subject of Workmen's Compensation, the President stated that the Montreal Branch had been very active in opposing the Archambault Bill in Quebec, where the Legislature had finally decided to refer the whole question to a Commission for report. He thought that a similar course should be followed in Ontario. Meanwhile, in view of the steps which were being taken in Quebec, it would be premature to draft a Bill and endeavor to have it introduced into all the Provincial Legislatures.

Mr. Rowley enquired what the Committee's object was in drafting a bill for submission to the Legislatures. He thought such a step had better be left to the several Governments. Mr. Thorn explained that it was considered advisable to do this in order to circumvent those who would make the legislation one-sided. He referred in this connection to the ruinous bill recently passed by the British House of Commons and explained some of the absurd conditions to which its objectionable clauses gave rise. Mr. Tindall also intimated that he thought it well to have an alternative bill in readiness in case the question were forced from the other side. The President believed it would be best to have the whole matter handled by the Commission of Enquiry consisting of manufacturers, laborers and other representative interests.

The report was finally adopted as presented.

RAILWAY AND TRANSPORTATION.

The report of the Railway and Transportation Committee was presented by the Chairman, Mr. W. R. Dunn.

In connection with the readjustment of rates he stated that the railways were busily engaged preparing the town tariffs on the reduced scale ordered by the Board of Commissioners, and that the same would probably become effective in Ontario territory on November 15th. As regards tariffs on international traffic the railways had had several meetings and had practically agreed upon the class rates as ordered by the Board, but as the territory as far back as the Mississippi River was involved it was not likely that the rates would take effect as early as the rates in Ontario territory. The commodity rates as ordered by the Board would be continued.

Other features of the report were as follows:

Railway Equipment.

From information received it is expected that the Board of Railway Commissioners will issue at an early date a statement of the situation on other railways similar to that issued in connection with the Canadian Northern in June last.

The situation has decidedly improved but there is still considerable shortage of cars and it is likely to continue until the close of navigation.

As a result of the per diem arrangement now in effect whereby railways have to pay fifty cents per day for foreign cars, one of the principal lines of railways states that only 44 per cent. of their equipment is away from home at the present time, whereas 60 per cent. of it was on foreign roads at this time last year—a strong argument in favor of reciprocal demurrage.

Toronto Switching.

The complaint entered against the Grand Trunk on behalf of the Toronto Branch in regard to interswitching at Toronto, has not yet been disposed of by the Board of Railway Commissioners. The Canadian Pacific in a similar way are demanding a similar toll on so-called "non-competitive business." The Manager of the department wrote the Board in September last asking that they withhold the approval of any switching tariffs submitted or to be submitted in view of the complaints which are now before the Board until the whole question of switching has been ruled upon, as has been stated would be done. This action was approved of. It is recommended that the Manager of the Department go to Ottawa with instructions from this Committee to ascertain just what the position of the Commission is and obtain some definite information as to whether or not it is the purpose of the Board to permit of the railways to advance their rates for so-called switching without regard to the protests and complaints which have been made and filed by this Association with the Board.

The report concluded with a reference to the conference at Washington called for the purpose of arriving at a uniform bill of lading. Mr. Walsh, who had just returned from the Conference, was able to announce that shipping interests there represented had taken strong exception to the draft bill of lading submitted to the Interstate Commerce Commission by the railways, and that after much discussion they had agreed to join forces with the Banker's Association in advocating a simple bill of lading which would be a receipt for the goods and an undertaking to carry them through to destination, making the carrier subject in every respect to the common law. Mr. Walsh stated that he considered this a most important point, as the indications all pointed to the adoption of such a bill by the Interstate Commerce Commission, following which it would most surely be adopted in Canada.

On motion of Mr. Dunn, seconded by Mr. Ellis, the committee's report was approved.

INSURANCE.

Mr. Jephcott reported verbally on behalf of the Insurance Committee, whose meeting had not been held until 11.30 the same morning. He stated that the license had been received for the Central Canada Manufacturers' Mutual Fire Insurance Company, which was now accepting business. The license for the other company would follow very shortly. He took occasion to express the belief that the organization of the companies was made possible only by the loyal support which the members of the Association had given them. The conditions they had had to meet were very arduous, and he doubted whether they could have been overcome at

all by an organization less powerful than the Association. The last of the difficulties, however, had now been met, and everything was running along smoothly.

On behalf of his committee he reported the following resolutions:—

Resolved, That the Finance Committee be and they are hereby empowered to adjust accounts with the Mutual Fire Insurance Companies, to determine the amount to be due by them to the Association, and how the same shall be paid.

Resolved, That the Executive Council be requested to sanction an arrangement whereby the Manager of the Insurance Department will give a small portion of his time to the underwriting work of the Mutual Insurance Companies, and for which the Companies will remunerate the Manager direct.

On motion of Mr. Jephcott, seconded by Mr. Rowley, both resolutions were unanimously adopted.

TECHNICAL EDUCATION.

The report of the Technical Education Committee was read by Mr. J. P. Murray. It referred to the campaign that was being conducted to secure the appointment of an expert commission of enquiry. Apparently the attitude of the Government was that it would be inconsistent with their past policy to interfere in any way with provincial rights, though they did not attempt to disguise the fact that they believed a thorough system of industrial education to be a most important part of our national industrial policy.

The Committee stated that it would endeavor to secure from each of the provincial Premiers a statement of the entire acquiescence of his government to the Association's proposal, and that when these statements were secured they would again go before the Government to urge their request.

The adoption of the report moved by Mr. Murray, seconded by Mr. Henderson, was carried.

TARIFF.

Mr. P. W. Ellis reported on behalf of the Tariff Committee, that before laying down any plan of campaign for the year, it had been decided to enlarge the committee by asking each active section in the Association to appoint a representative to serve on it. It was believed that a plan of campaign which would be generally acceptable and productive of the best results could be formulated when this new and larger committee came together. The recommendation of the Montreal Branch regarding the leeway in the Dumping Clause regulations would be considered at that time.

The adoption of the report, moved by Mr. Ellis, seconded by Mr. Cockshutt, was carried.

The report of the Montreal Branch, read by Col. Smart, and that of the Toronto Branch, read by Mr. J. S. McKinnon, were both received and will be found below.

Under the head of new business, it was moved by Mr. Henderson, and carried, that in future the funds of the Association should not be drawn upon to make presentations to employees.

The meeting then adjourned.

MONTREAL BRANCH.

The regular monthly meeting of the Montreal Executive Committee, on October 10th, was the largest in the history of the Branch, sixteen members being present.

Report was made that at the Toronto Convention there were 84 present from Montreal, and it had been found possible to run a special train on the night of September 23rd.

At the present moment a large number of matters are under consideration by the Branch. At the invitation of the Canadian Fire Underwriters' Association, the Branch has been represented at special meetings of representative bodies to consider the present fire protection situation in the city of Montreal, and to find out what is necessary to increase the safety of the city.

The Labor Accidents Commission, appointed by the Quebec Government, is now sitting, and the Branch will shortly present a memorial setting forth the views of the members on this subject.

In view of the fact that the water rates on houses and shops in Montreal have been reduced, and nothing done to relieve the high charges made to manufacturers for water, information is now being collected on this subject, and it is probable a memorial will be sent to the City Council by the Branch. The customary Fall Entertainment will be held on November 5th, in the Canada Club, and will be of the nature of an informal dinner.

TORONTO BRANCH.

At the regular monthly meeting of the Toronto Branch Executive, a question was raised as to whether the city were within their legal rights in calling for the payment of the union or prevailing scale of wages in the specifications for all city contracts. The Executive feels that the present specifications are unfair to the contractors because the union is not a party to the clause covering the payment of union wages, and a Committee will, therefore, confer with the Association's solicitors with a view to drafting a clause which would be acceptable to the city and which would make the unions a party to the wages clause so that they will be prevented from declaring a strike for higher wages, and of hampering the contractor after the contract has been let.

Water Works Machinery.

At the request of some of its members, the Branch will oppose the attempt which is being made to restrict the purchase of water-works machinery by the city to firms working a nine-hour day and running a union shop. The unions are laying their views in this matter before the city at an early date, and the Branch will arrange to present the manufacturers' side of the case at a later date.

Customs House.

Some members of the Branch have complained of the delays in passing entries at the Customs House since the new system went into effect on September 3rd. The slowness in passing express entries and free entries are particularly complained of, and the Secretary was instructed to take these complaints up with the Inspector and report at the next meeting of the Branch.

The various Convention Committees made their final reports and were dissolved.

Promoters from Toronto have interviewed the City Council and the Board of Trade, of Stratford, regarding the establishment here of an immense industry to manufacture electrical cables and fittings, brass work and hardware. The concern is incorporated at a million and a half dollars, and would erect three separate buildings, 300 by 100 feet, at a cost with equipment of about half a million dollars, and would employ the first year 175 to 250 men. A site of ten acres would be required, and the company ask some concessions.

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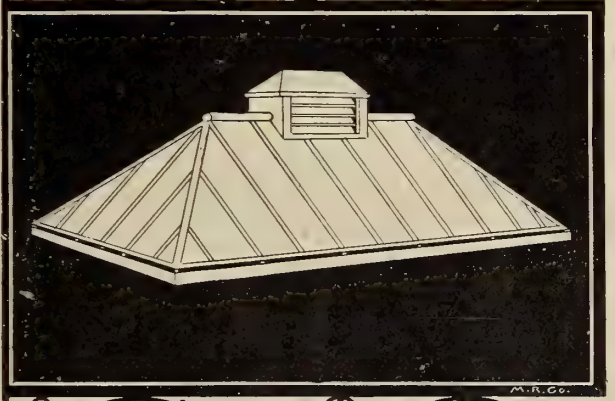
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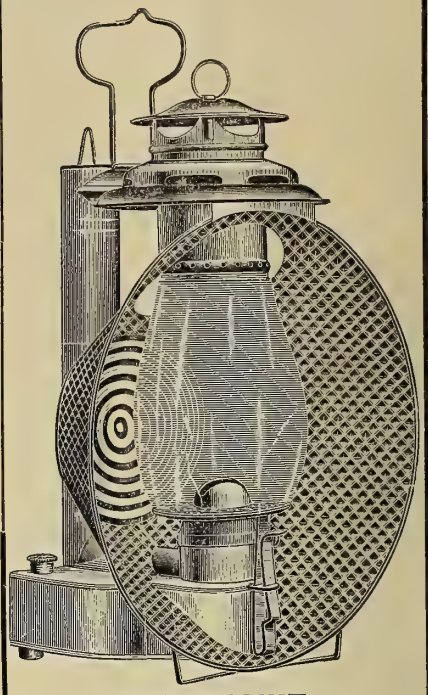
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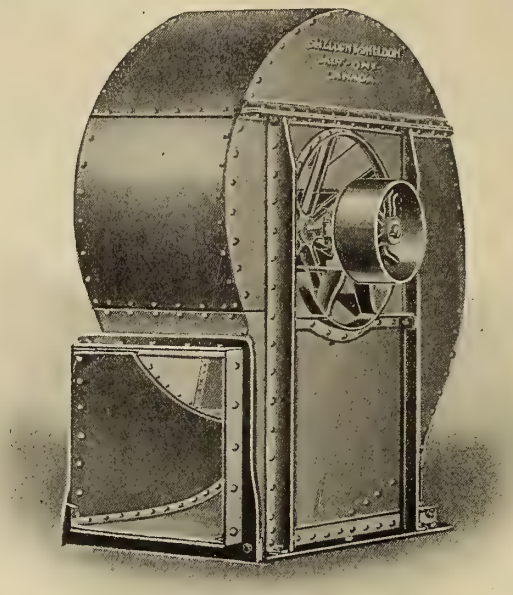
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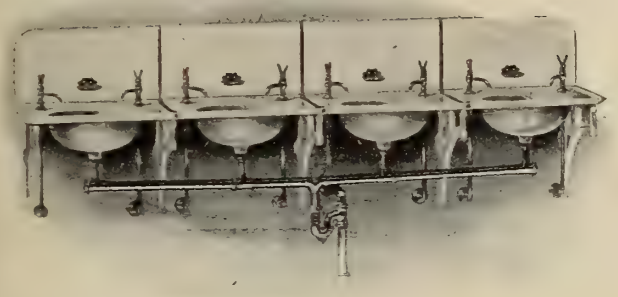
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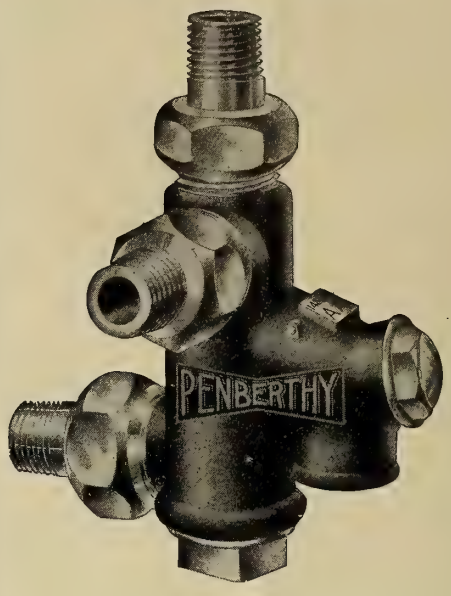
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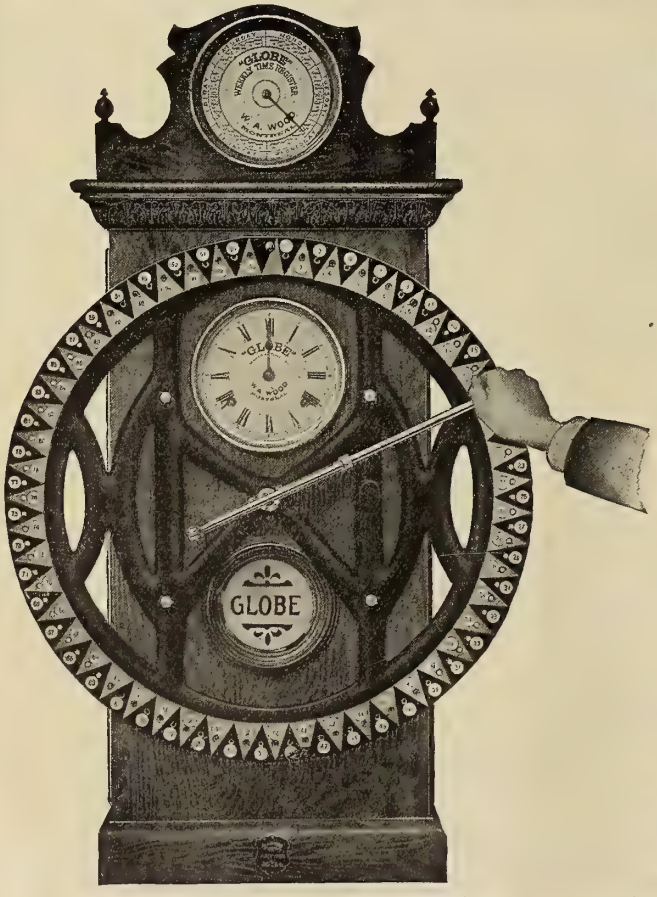
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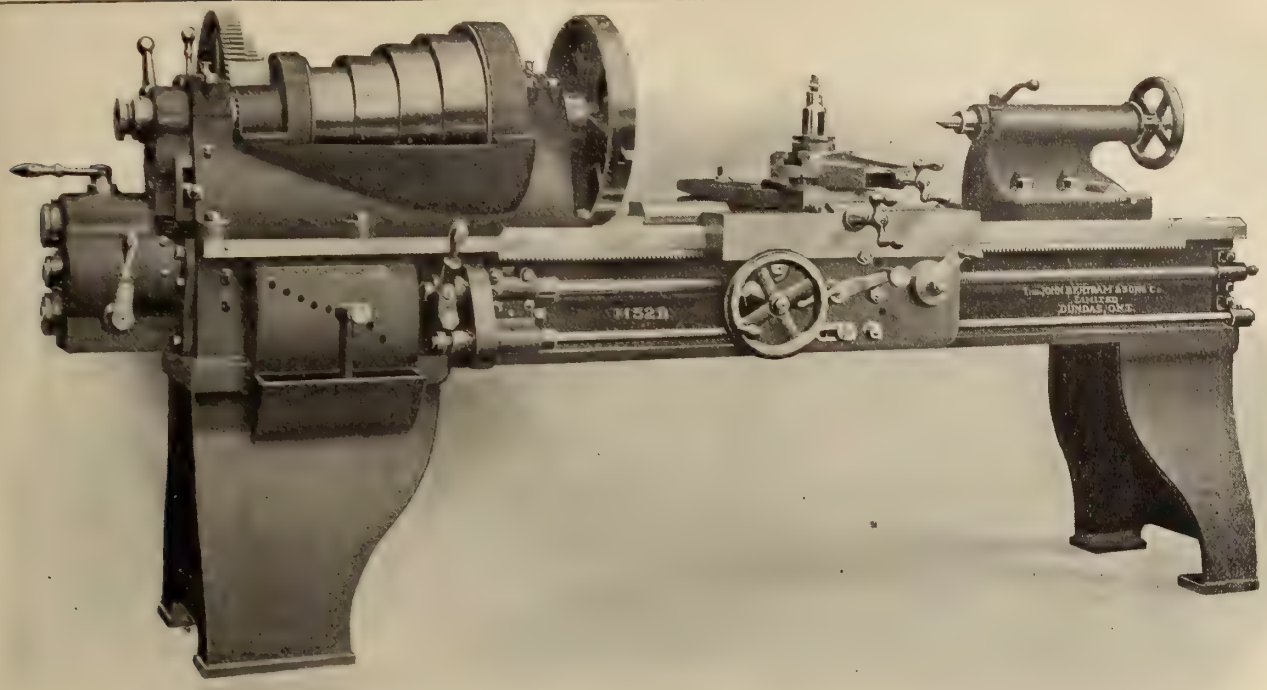
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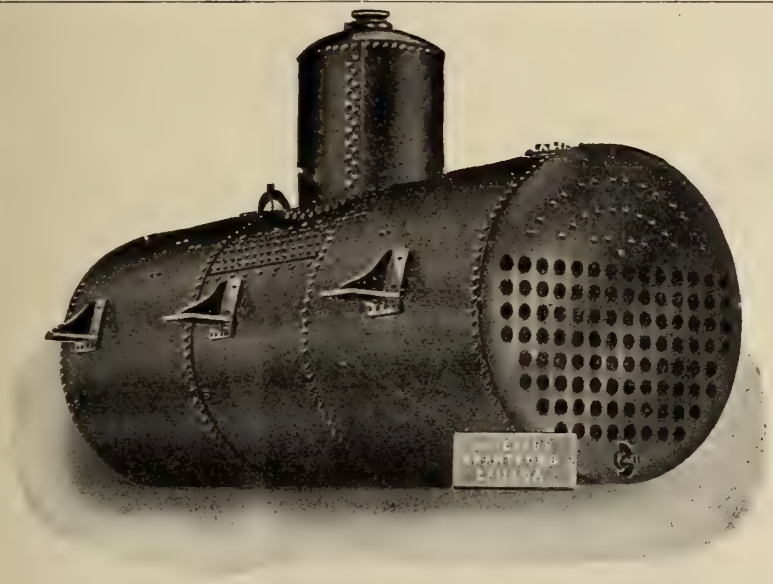
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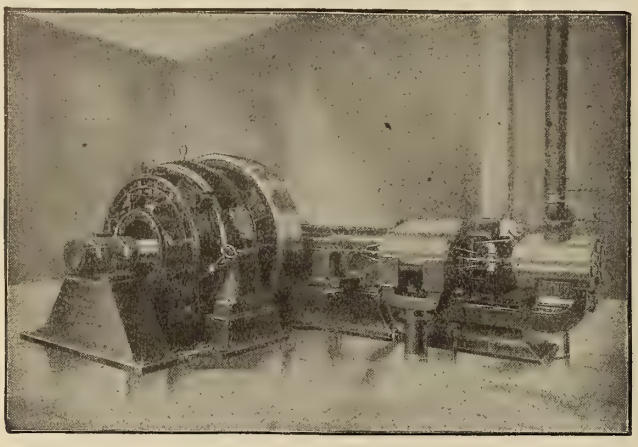
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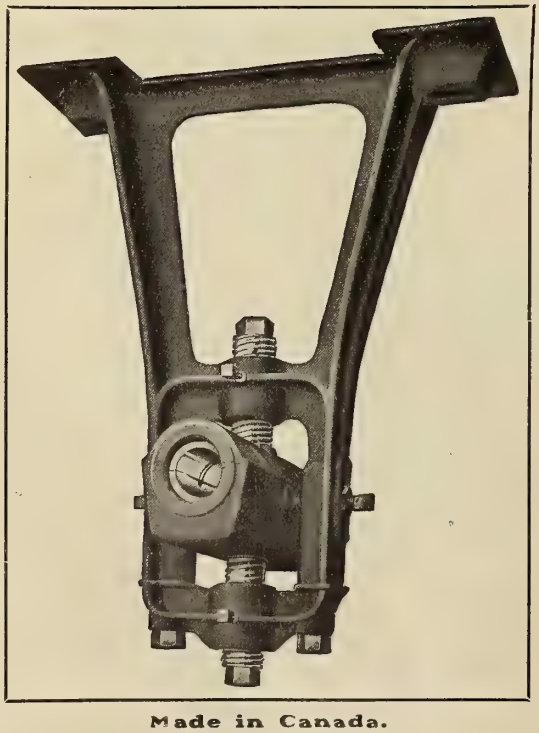
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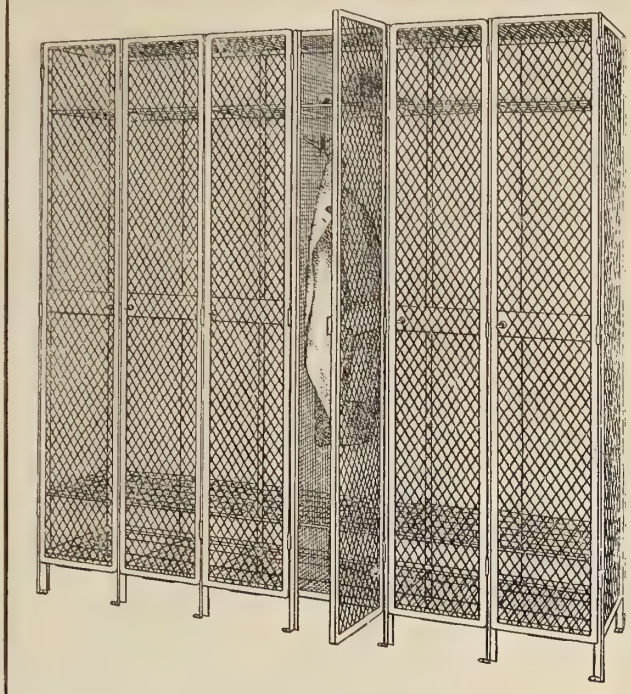
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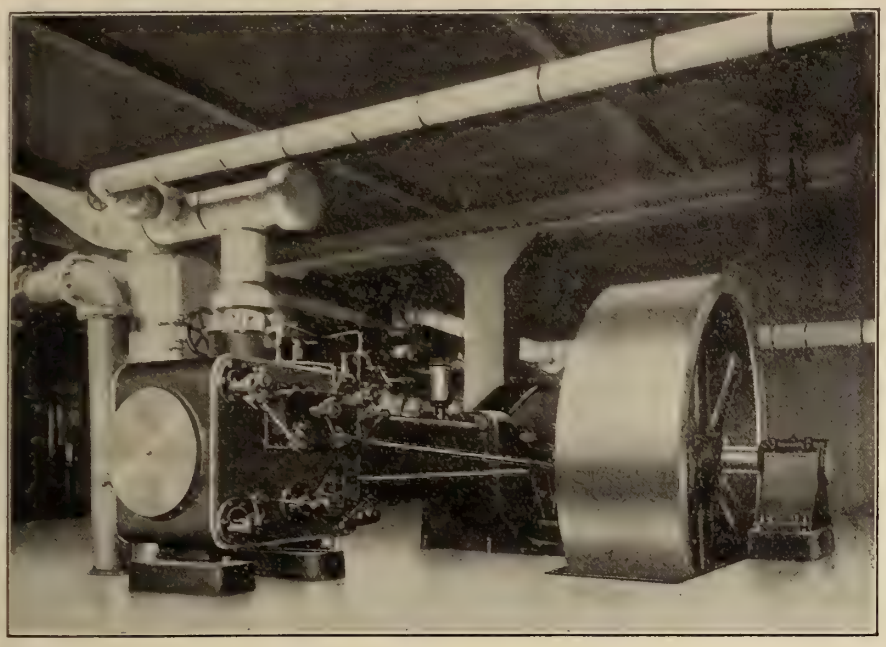
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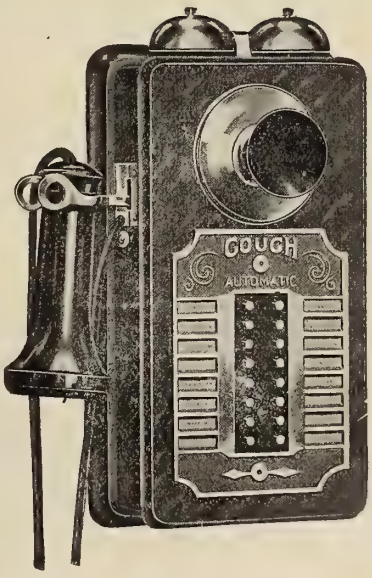
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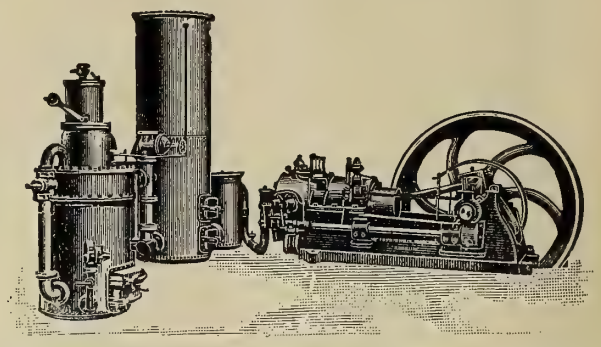
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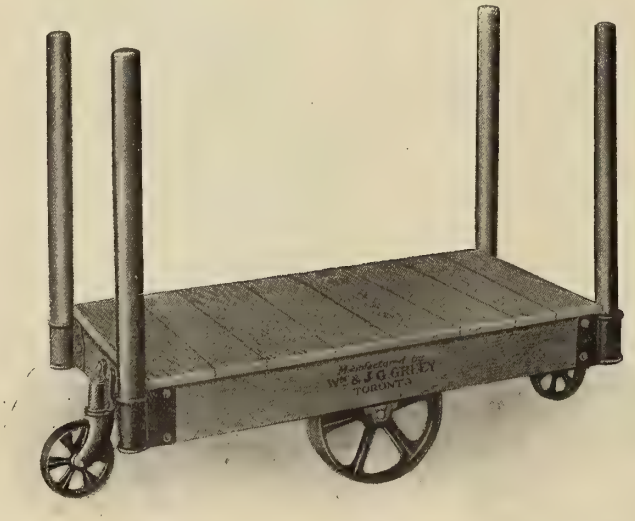
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INDUSTRIAL CANADA

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MONEY AND THE MAN.

THE present stringency of the money market should teach a lesson to the workingman which, if he learns it, will redound to his future profit. During the years just past, when money was easy, employment plenty, and wages high, he was inclined to listen to the pratings of agitators, who sought to teach him discontent. He was told that he was being wronged, that his employers were growing rich out of his labor, and that he was not getting a fair share of the profits. In far too many instances these arguments prevailed to the extent of causing the workingman to throw up his employment and go out on strike. Sometimes he got a small increase in his pay and sometimes he did not; but every time he lost all that he could have earned while wasting his energy following the lead of a professional agitator, whose very existence depended upon the wasteful strife he could create between the workingman and his employer. When the battle was over, the disturber of industrial peace justified the action he had advised by calculating for his dupes the amount of damage they had done to their employers' interests. This is a very fair description of the workingman's attitude in times of plenty.

But now that the turn has come, money is scarce and there is a possibility of a slackening in the demand for labor, where has the workingman to turn for assistance and employment? The agitator, himself a parasite, cannot help him. Back he has to go to the manufacturer he tried to injure, and if his reason has returned, he will recognize that when the pinch comes the only friend he has is the man who risks his capital in establishing the industries of the country. He will not now begrudge him the profits he made and the surpluses he laid away when times were good, for out of these profits must come the wherewithal to sustain himself and his wife and children. The pity of it is that these plain truths are not brought home to the workingman. If he were taught to realize his helplessness without the aid of capital, and the folly of listening to self-interested agitators who seek at every opportunity to injure, and even to destroy, the industries that give value to labor, it would be better for him and for the country in which he lives.

If our mills are running to-day and our factories giving employment to the workingmen of this country, it is because the manufacturer has husbanded his resources and saved his profits. If he had paid out all he made, without retaining a fair profit and a reasonable surplus, the state of the workingman would be pitiable indeed. The banks have no money to lend and the only money the workingman has to depend upon for his support is what the manufacturer has saved. It may be a startling way to put it, but nothing could be clearer than that the workingman, in times such as these, has to live on the past savings of his employer, and a lucky thing it is for him that his employer was able to save enough to carry them both over. When banks are not loaning money, and wages are being earned and paid, the money has to come from somewhere. It does not grow up out of the ground nor rain down out of the sky. There is only one place it can come from, and that is from the past savings of the employer.

"But," says someone, "if it had been paid out in wages the workingman could have saved it for himself and he would not now be dependent." The answer is that many workingmen have saved a part of their earnings, and in the aggregate they amount to many millions; but the workingman does not take chances with his money. He will not take the risks the manufacturer does, and he will not even lend it to help on the industries in which he earned it. As soon as money got scarce in the United States, what did the workingmen do? Did they go to the banks and say, "Lend our money to our employers to help keep the factories where we earned our living running. We took all these millions out of the industries of the country, and we want you to put them back there so as to maintain them in operation"? No, the

workingman does not take risks like that. He is not looking for extra profits at the risk of his savings. He is not made of the same heroic stuff out of which investors are made. What the workingmen of the United States did was to go to the banks and demand their money. In one day in New York they took eight millions out of one bank alone, and took it home with them and hid it for fear it might be loaned to some manufacturer to pay back to themselves or some other workingmen. The result over there is that many industries are closing down either in part or altogether. The wages they have been paying were so high that they were not able to lay aside enough to carry them over a crisis like this, and they are compelled to close down and dismiss their employees. That is the way the legitimate surplus of a business helps it when it has been paid out in wages.

If the workingmen of this country have any real friends amongst them who profess friendship for them, they will make a study of the present situation and teach them a few of the truths indicated above. The Canadian workingman is intelligent, but too easily influenced by agitators, and it is the duty of his real friends to put matters before him in a fair and reasonable light. No more opportune time could be chosen than the present, when he has before him the object lesson of the situation in the United States. Let him understand that his interests and the interests of his employers are one, and that the more money he can earn for them, the greater his own guarantee of profitable and uninterrupted employment at a fair wage. Teach him that when his employers are able to issue an annual statement showing a substantial surplus of profits, he should throw his hat up in the air and cheer for their success, for their success is his success, and their savings his only real guarantee of employment when times are hard and money tight.

MADE IN CANADA.

EVERY article sent out of the factory bearing the label "Made in Canada" should have more than the mere label to recommend it to the purchaser. It should have "quality," and "quality" of such a high standard that purchasers will look for it as a guarantee that they are getting their money's worth. Every patriotic Canadian should buy Canadian products in preference to all others, and the retailer should purchase from the Canadian manufacturer. It is in his own interests and the interests of the country at large that he should do so. The money he pays to foreign manufacturers goes out of the country, and is paid over to workingmen of another land, who can never become customers of his; while the money he pays the Canadian manufacturer is kept right here in Canada, and works back to him again in the course of time. It must be evident to anyone who gives the subject any thought at all that keeping our money at home, where we have a chance of getting it back, is by far a wiser thing to do than sending it so far away that it is never likely to return. If, then, the retailer buys foreign goods in preference to Canadian it is because there is a prejudice against the home product amongst his customers. It is to be feared that one reason for this prejudice is the inferior goods which some Canadian manufacturers have turned out, relying on the protection of the tariff and the patriotism of the people to secure sales for them. This is a great mistake, and it injures not only the one who is guilty of it, but every other manufacturer of Canadian products as well. Too much stress cannot be laid on the importance of quality. If it is "Made in Canada," have it made so well that it will be wanted for its intrinsic value and not merely as a matter of sentiment. Many of our manufacturers have become alive to the importance of quality, and are turning out products equal, and in many instances superior, to foreign lines brought into competition with them. How often have you heard a salesman showing goods say, "These are superior quality imported goods; but here is a cheaper line made in Canada, which is not as fine, but may suit your purpose as well." It is a hard thing to have to listen to, but, unfortunately, the goods themselves are too often the salesman's justification.

There is no reason why anything we make in Canada cannot be made as well here as anywhere else in the world. We have the protection of a tariff, in many lines not as high as it should be, it is true, still we have some slight advantage in this respect, and if we put a part at least of that margin into our product there is no reason why we should not turn out goods which can hold their own with the world. The purpose of the tariff is not to enable us to force inferior goods of our manufacture on the people of this country. Its object is to enable us to turn out as good goods at home as we can get from abroad, and leave us a fair margin of profit. Those who have realized their opportunity in this direction are to-day turning out products of which all Canadians should be proud, and when all our manufacturers come to adopt this policy, the label "Made in Canada" will have a meaning for the purchaser, and will sell the goods.

Generally speaking, Canadians are not enthusiastic regarding articles manufactured in Canada, but there is a noticeable improvement in this respect of late years. Canadians talk enthusiastically now of the superior cheese and butter we manufacture, and what Canadian has not referred proudly to our wheat products as "the standard of the world?" This is a spirit that should be fostered. In the United States every citizen speaks with pride of their manufacturers, and maintain that they beat the world. A prominent New York woman recently gave her son $5,000 on his birthday to buy himself an automobile. The only stipulation she made was that it should be one built in the United States. This is the spirit that has built up the vast industries across the line, and it is the spirit we are lacking in here. The press of the United States is largely to be thanked for having inspired the people with this national pride. They are not everlastingly picturing their manufacturers as highwaymen, as about half the press of Canada have been doing for years. Instead of grumbling at the protection their manufacturers enjoy, the United States press devotes its space to praising the superiority of their products, pointing out every advantage they possess. If our Canadian papers devoted more of their space to this kind of campaign they would find it a good investment. The people of Canada are not lacking in honest pride for things Canadian, as is shown by the instance already mentioned; what they lack is education. If the press would help in inspiring them the "Made in Canada" label would soon have a meaning for all Canadians that it does not possess to-day.

THE FARMER'S INTEREST.

IT has long been a favorite custom of politicians seeking the farmer's vote to go about telling him that he is a much abused individual, that all the good things the government has are being handed out to the manufacturers at his expense. This may be a clever way of getting votes along the back concessions, but it is not in accordance with fact. The manufacturers who are thus accused of living off the farmers are, as a matter of fact, doing more to build up the farming communities of this country than any other class. When

the settler arrives to take up land he, as a rule, invests all the money he has in the land itself. After he has bought all he thinks he can handle he has nothing left to give him a start, and he turns to the manufacturer, who trusts him for the machinery he requires and the necessaries of his home. If it were not for the manufacturer he would not be able to start at all, and if it were not for the protection he receives there would not be any manufacturer to trust him. It is very effective, no doubt, to tell the farmer how much cheaper he could purchase his needs if there were no tariff, but ploughs dumped on the Canadian market would not help him out if he did not have the money to pay the foreigner for them. The Canadian manufacturer is the Canadian farmer's best friend. He not only trusts him with his supplies when he starts, but he creates the market for his products when he has them ready for sale. Close up all our factories and the farmer will be one of the first to suffer.

It is foolish to talk of any one class of producers living off of any other. The farmer is necessary to the manufacturer and the manufacturer is necessary to the farmer. The one without the other would not prosper as both are prospering in Canada to-day. The best and the most profitable market the farmer has is the home market. Without it he could not make nearly as much money out of his crops as he does now. There are numerous products of the farm which are utterly useless for export, but which bring a big profit when sold in the manufacturing cities and towns within easy reach of the farmer. As proof of this, you have only to inquire the value of farm land within easy reach of a city or town, and compare it with the price of equally good or even better land which is more distant. The crops raised for home consumption on the convenient farm bring much larger returns than the crops grown for export on land so far removed from important manufacturing centres that they cannot be used for the purpose of supplying the demands of the workingman's table. If, therefore, the tariff aids in the building up of manufacturing centres in Canada, it is one of the best things for the farmer that could be conceived. If the argument were followed out to the end, it would be found in the final analysis that the farmer is by far the greater gainer from the tariff, and the men who tell him the contrary are only pulling the wool over his eyes.

THE PROTECTION OF OUR PULPWOOD.

A DEPUTATION from the newspaper publishers of the United States has been waiting on President Roosevelt and urging upon him the advisability of removing the duty on paper, pulp and pulpwood, and he has sent it away satisfied that some action will be taken along the lines they suggested. The object of the removal of the duty on pulp and pulpwood is to enable the mills across the line to make an onslaught on the Canadian forests, now that their own are within a comparatively few years of exhaustion. The question to be considered by Canada is whether or not we are willing to become mere choppers of wood for the paper mills of the United States. When the full meaning of this move across the line is realized in this country, it is to be hoped our government will rise to the occasion and protect us against the humiliation and loss which is threatened. Surely we Canadians are not satisfied to eke out a humble existence chopping wood for the paper mills of the United States. If we are, then we are not worthy of the magnificent resources with which nature has endowed us. In our pulpwood forests we have an asset of marvellous value provided we take such measures as will ensure them being turned into a finished product in our own land. If, on the contrary, we allow our American friends to come over here and turn the country into a wood yard for their benefit, our forest resources will become a source of humiliation rather than of profit.

Our salvation is in the hands of the Federal Government, who alone have the power to protect us. The government of the United States maintains a tariff against us out of all proportion to our tariff against them. They do not want anything we make or grow or possess which they have or can produce themselves. That much is quite evident from their attitude towards us; and when we find them proposing to remove the duty they have maintained against us on any product we possess, it is time for us to get on the defensive. They do not want our pulpwood because of any sudden outburst of trade friendship for us. There is, surely, no one in this country foolish enough to imagine anything so absurd. They want our pulpwood because they have used practically all they had of their own, and if they do not get ours their mills will have to close down, and their workingmen be thrown out of employment. While we may sympathize with and be sorry for the men who lose their employment, still our first duty is to ourselves and to our own workingmen. Our workingmen are entitled to all the employment we can create for them, and it would be a crime on the part of our government if it allowed the workingmen of a foreign land to steal it away from them, and that is what they would be doing if they were allowed to carry off our supply of pulpwood and turn it into paper in their own mills. The remedy is such a simple one that the approaching session of parliament should not be allowed to pass without provision being made for the application of it. A prohibitive export duty on pulp and pulpwood is the proper, and, in fact, the only defence against the threatened invasion.

When the Ontario Government put an embargo on the export of sawlogs cut on Crown lands, the mills on the American side moved over to the Canadian side, and our workingmen got the benefit that was their due. It was a distinct gain to the Province, and stands to-day as an object lesson which should teach wisdom to the Federal authorities. If we refuse to allow our pulp forests to be hewn down and carried off to the American mills, the mills will have to come to the forests, and we will have an enormous industry spring up here which will give employment to thousands of men, who will spend their wages with our merchants, thus building up our towns and cities, and consuming the products of our farms and factories. This advantage we have, and surely we are not going to sit idly by and see it stolen from us under our very eyes. No sane people would tolerate such a state of affairs, and if we Canadians do we will leave ourselves open to the reproach of national imbecility.

TECHNICAL SCHOOLS.

EVERY year the need of technical schools for the training of our tradesmen in the various callings of the manufacturing field becomes more apparent. Competition has become so keen that the reduction of cost in manufacturing has grown into a fine art. Everything is specialized now-a-days, because the specialist can turn out more and better work than the all-round man, and he can do it at less cost. While this has been a boon to the manufacturer in one sense, it has brought him face to face with a new difficulty in the manning of his factory. He needs foremen, superintendents and managers, and for these positions men with all-round technical knowledge are required, and the problem

of getting men of this stamp is becoming more difficult to solve every day. Under our present system they are not developed in the factory itself, as was the case under the old order of things, when the factory was its own training school. No manufacutrer who hopes to keep in the race can afford to have a student class on his pay roll. Competition has cut profits to such a fine point that every man who draws wages has to earn them, and he cannot earn them when he is only learning. Of course a certain amount of teaching has to be done, but it has been reduced to such an extent that it is next to impossible for an apprentice to acquire a trade in its entirety in any of our factories. He is taught how to make some particular part of a finished product, and he remains all his life making that part, and that is all he knows of the business. There may be twenty or a hundred parts in the finished article, and there are as many specialists employed to turn it out. In a clothing factory, for instance, one gang of men do all the cutting, another make coats, another trousers and another vests; and these again are divided into collar makers, sleeve makers, buttonhole workers, padders, and another gang devote their attention to the pressing; and of the whole lot possibly not one but the foreman could turn out a suit complete. The same is true of every line of manufacturing, and it can readily be understood how difficult it is to get men who understand the whole business to take charge of the factory.

The solution of the difficulty is the technical school, and it should be an institution maintained by the government, the same as all other schools. We have agricultural colleges for the training of farmers, which have proven highly beneficial; and we should have similar institutions in which ambitious young men could be trained to take the higher positions in our factories. The government owes it to the workingman to give him a chance, and there is nothing that could be of greater benefit to him than a training school of this description. Go into our factories to-day, and in many of them you will find the best positions held by men from countries that have realized the importance of this class of training. We have to do something of the same kind, or the day is not far distant when our workingmen will all be serving under foreign foremen and superintendents. The fault is not with the men, but with those in authority who fail to provide them with the opportunity which is their due. It is not reasonable to expect the Canadian manufacturer to turn his factory into a training school. He cannot afford to do it and keep in the strenuous race which competition has set. The government alone can come to the rescue, and if there is anything in its profession of friendship for the workingman it will not fail him at this stage in his development.

A CURIOUS CLAUSE.

THERE is a clause in all civic contracts let by Toronto which works in what is, to say the least, a very curious manner. It provides that a contractor doing work for city shall employ only citizens who have resided in the city for six months, and he shall not compel nor permit workingmen he employs to work more than nine hours a day except in cases of emergency, and then only by written permission of the City Engineer. This is bad enough if there was nothing else to it, but the authority of the city council does not extend beyond the city limits, and contractors outside the city who secure civic contracts are not bound by it. It, therefore, operates as a handicap to citizen-contractors, and is really an injury to those whom it is intended to benefit, for the reason that their employers cannot, working shorter hours, tender as low on contracts as outsiders can who have the longer day. The local contractor has to charge the city with the lost hour, which enables his outside competitor to underbid him to that extent. Mr. J. G. Merrick, Secretary of the Employers' Association, has written to the city council calling attention to the curiosities of this piece of civic legislation. The occasion for the complaint was the demand made by the Machinists' Union to have the clause enforced The Union have lately been defeated in an attempt to force the nine hour day on their employers, and they are now trying to induce the city council to take up their fight by enforcing the nine hour clause in civic contracts, which has been disregarded in the past. It will be interesting to watch how the council gets out of the tangle. If they enforce the clause they will be discriminating against the firms who pay them taxes, in favor of outsiders who contribute nothing to the city's revenues, and they will not be helping the workingmen, because the firms who will stand to get the city's work on the lowest tenders are those outside the city, and therefore are not affected by the city's legislation. The regulation of relations between employers and employees is too big an undertaking for a city council to handle. Even the Federal Government approaches it in fear and trembling. The Toronto legislators who conceived the nine hour clause are, therefore, to be congratulated for their bravery if not for their wisdom. As Mr. Merrick points out, it is very doubtful if a clause of this kind would stand in law, for the Municipal Act requires that public tenders be called, and tenders called subject to this discriminating clause cannot be properly called public, because they are not open to public competition on equal terms. There is a lot of trouble coming to Toronto's law makers if they persist in this kind of legislation. If it is in their power to secure men ten hours' pay for nine hours' work, it is also in their power to make it eight, or five, or three hours, or they might go only a step further and make every workingman who has resided in the city six months independently rich without working at all. Utopian legislation has never yet failed to make the fathers of it look ridiculous, and if the Toronto council are not careful history will repeat itself in their case.

OUR RAILWAY PERIOD.

THE notices of charters for new lines of railways and extensions of old ones which will be asked at the present session of the Dominion Parliament indicate that there will be no cessation of railway building in this country in the immediate future. We are told, on the other hand that railway building in the United States will be practically at a standstill during the next year, or perhaps longer. One of the greatest railway magnates across the line has said that the United States already has about all the railways it can support. The position of the two countries seems to be that while the period of railway building on a large scale is at an end in the United States it has just begun in Canada. In the United States there are a number of huge corporations whose success has come largely from the supplying of the materials necessary for the building of railway lines, and these immense plants will now be forced into idleness unless they can get a new market for their products. What is more natural than that they should turn to Canada as the most promising field for their future operation? If they can secure a footing in this country it will mean a new era of prosperity for them, but what will it mean for us?

Railways in this country are granted charters, carrying subsidies, bonding privileges, government guarantees and other advantages; all on the ground that they are works for the development of the country. Bearing this fact in mind the least the country can expect in return is that they will fulfil the promises held out on their behalf, and that every

dollar's worth of development of which they are capable shall be for the benefit of Canada and not for some other country. For instance, the building of our railways should carry with it the development of our steel industry. Every rail laid on a Canadian railway should be a "Made in Canada" rail. We are making steel rails at two plants now, and they are good rails, and if these plants are not able to turn out all the rails required as fast as they are wanted, the railways should build more slowly so that the rail makers will have a chance to catch up with them. The delay of a year or two in the laying of rails on any particular line would be more than offset by the building up of an industry which would give employment to thousands of men and be a lasting benefit to the whole country. If we do not take advantage of our railway building period to get all there is out of it for ourselves, the same opportunity will not come our way again. While the building of railways in the West is undoubtedly a great thing for the farmer, the building up of an immense industry in the East, where he can market his products at a good profit, is even a greater thing for him. The railway furnishes him transportation, the factory a market, and there is no reason why both should not be secured for him at the same time by the exercise of a little judgment and, if need be, a little patience. If he does not get both for the money he is paying out through the government, then he is being cheated out of half of that to which he is entitled.

THE ASIATIC LABOR PROBLEM.

OUT in British Columbia there is a strong feeling against Asiatic labor, and the cry has been raised for a "white man's country." It is a cry that appeals to all of us. The employer is just as anxious to have the whole of Canada a white man's country as any workingman in British Columbia, but he has to have his work done, and if there are no white men to do it, he has to make use of such labor as he can secure. The great distance across the continent prevents the workingmen who come to Canada from European countries coming into competition with those of British Columbia, and if the latter can succeed in keeping out the Jap and the Chinaman, they will have a close corporation, and will be in a position to dictate terms to the employers. Such a condition of affairs is far from desirable, and would operate to the detriment of the Pacific Province. There is a lot of development work to be done out there and men have to be had to do it, whether they are white or Chinese or Japs. If the Federal Government takes measures to stop the inflow of the Japanese and the Chinese, it will have to provide some other means of supplying the demand of the labor market, or see the industries of the Province brought to a standstill.

Industries put at the mercy of labor are soon put out of business altogether, and cutting off the present supply of labor from the Orient, without providing some other source, would leave the industries of British Columbia in a bad predicament. The government would be compelled, in justice to the British Columbia employer, to see that a fair share of the laboring class who land at our Atlantic ports were passed on to British Columbia. It is not very clear how funds for this purpose are to be provided, but certainly if the government goes so far as to take away from the British Columbia employer his present source of supply, it cannot refuse to provide him with another in its stead. It is quite evident that the object of the workingmen of British Columbia in fighting Asiatic labor is to prevent competition and enable them to hold up employers. It is to be expected, therefore, that any scheme which the government would propose to relieve the shortage of labor brought about by its own act would be as strenuously opposed out there as Asiatic labor is to-day. The fact that white men would be going in instead of Asiatics would not make any difference to the gentlemen who are carrying on the present agitation. The problem is certainly a difficult one to handle and do equal justice to everyone concerned.

POLICY OF CANADIAN BANKS.

MANY compliments are being paid the Canadian banks these days by American financiers; but the compliments which Canadian borrowers pay them are of a different character. Millions of good Canadian money are going across the line to earn dividends for the stockholders of the Canadian banks, while Canadian factories are compelled to lay off men because they cannot get the ready money to pay them their wages. While the Canadian banks are playing the part of an "uncle" to stranded Americans, they are telling their Canadian customers who ask for loans on gilt-edged securities that this is a time for caution, and they had better go slow, close down for a while and let the Canadian workingman go hungry. Our banks are given charters with privileges of the most valuable nature, on the plea that their purpose is to aid in the carrying on of the commerce of the country. It was not the intention of the Banking Act to empower any body of men to gather in the savings of the people of this country in order that they might become money lenders, at usurious rates of interest, in the United States. It was intended that the banks would act as a medium through which the savings of the Canadian people would be made available for the development and carrying on of Canadian business. If the spirit of our banking system had been lived up to we would not have felt any money stringency on this side of the line. In order that a similar state of affairs may not occur again, Parliament should pass an amendment to the Act at the present session, which will not leave the interpretation of its intention to interest-hungry bankers.

THE INVASION OF THE UNEMPLOYED.

THOUSANDS of workingmen who have been laid off in the United States are flocking into Canada in search of employment, and some one has raised the question of how to keep them out. There is not enough work for our own men in some lines, and it is pretty hard to see outsiders coming in to compete for what there is. It is no worse, however, to have these men coming in to make things harder for our own men than it is to have labor unions, with headquarters in the United States, sending agitators over here in times when labor is scarce to make trouble for the employer. The workingman is really only getting a little of his own medicine, and it is not the employer who is responsible for it, either. The Canadian employer should, and no doubt will, give the preference to the Canadian laborer. The "Made in Canada" principle should be applied to labor as well as to the output of labor. There is no doubt that manufacturers who find it necessary to lay off a portion of their hands for a time will give them the preference when their places become available again. Indeed, the employers are doing all they can to help their men, and many of them, rather than discharge any of their old hands, have given all half time, so that none of them will be left entirely out of work. It would be much less bother and expense to the manufacturer to lay off a part of his hands, but the average employer has his men's interest at heart, and, although he does not get credit for it, is always willing to stand any reasonable loss himself, rather than have them suffer. The Canadian workingman has, therefore, very little to fear from the American invasion. He will get the first opportunities that offer, and he ought not to forget it in the future.

BY-THE-WAY.

With men being laid off in all lines of industry the labor agitator is keeping very quiet. Nothing has such a sobering effect on these gentlemen as being thrown on their own resources for a period. It's one of the compensating features of a period of hard times.

Hard times have been defined as "a period of acute commercial cowardice." The definition seems to describe the position of affairs at the present time better than on any former occasion of depression. We are told that there is more money in existence to-day than ever before, but the people who have it are afraid of the risk.

Hon. Mr. Fielding offered to lend the banks $10,000,000 of government money. The banks say they do not need it. Why, then, the cry of tight money and their refusal to accommodate their customers as usual?

Wheat is selling at a higher price in Canada than on the American market. A few years ago the farmers wanted to get free access to the American markets so as to get the best price for their products. They will now be as anxious to keep the Canadian market for Canadians as any other class.

When we have arrived at the point where people will say, "If it's made in Canada, it is good," it will be worth while to have it marked "Made in Canada." How soon we get to that point rests with ourselves.

A workingman out of a job learns to respect capital. He is like the boy who has set out to shift for himself. He never realized before how good his father was to him or what sacrifices he had to make for him.

WILL GIVE TECHNICAL TRAINING.

IT came as a general surprise when the Government of Nova Scotia announced, early last spring, that they would establish Technical Schools throughout the Province. In some of the bigger provinces it has been the custom to smile indulgently at the industrial efforts of the provinces down by the sea. But while they were talking of technical schools Nova Scotia was laying its plans. The plan on which they will be developed has been outlined by Professor Frederic H. Sexton in the current issue of the *Canadian Labour Gazette*.

Most of the efforts of the Department of Technical Education have been occupied, since the passage of the legislation regarding technical education, in organizing the local technical schools as provided in the act. For the present year, there is to be one of these schools in each of the following industrial centres: Sydney, Amherst, Halifax, New Glasgow.

The classes for the ensuing year are to be held entirely in the evening, beginning November 3rd and closing April 30th, with two weeks' intermission covering the Christmas-New Year's holidays. Each class is to be held twice a week for two hours each session.

The teachers are for the most part men engaged in practical work, who hold positions of responsibility in various industries. A number of the instructors have had previous practical teaching experience, besides being eminently fitted from long experience in having acquired just such knowledge as the workingmen need.

Classes are to be held in the following subjects: English language, Practical Arithmetic, Practical Geometry, Mechanical Drawing, Architectural Drawing, Mechanism, Electricity and Chemistry.

It is intended to carry out all these classes in a practical rather than in an academic manner, so that they will engage and benefit the craftsman, who will attend only so long as he is learning something which is helping him in his every day work.

The expenses of the schools are to be borne by the locality in which they are situated and the Provincial Government, the former supplying proper rooms, heat, light, and one-half the cost of instructors, while the latter pays the other half for the teachers, and furnishes the equipment for conducting the classes.

The fees for each class are from three to five dollars, varying with the nature of the course. Two-thirds of the fee will be refunded to each student at the completion of the course who has attended 90 per cent. or more of the sessions of his class; three-fifths refunded for a percentage of 80 to 90 per cent., one-half for 70 or 80 per cent., and two-fifths for 60 to 70 per cent. attendance. Thus the classes will be practically free, the fee serving mostly as an incentive to attend well.

A diploma signed by the teacher and countersigned by the Director of Technical Education, will be granted to all students who have satisfactorily attained the required standard in any class, attesting to proficiency in that class.

Provision for Miners.

The schools for the instruction of coal miners have been transferred from the Department of Mines to the Department of Technical Education. These schools are conducted for the benefit of those miners who wish to educate themselves in the evenings, so that they may obtain Government certificates of competency. Under the new arrangement, in each of five coal mining districts, one teacher will be appointed, who will devote his whole time and effort to this work alone. This teacher must possess a manager's certificate or the proper practical and theoretical knowledge requisite to teach all the branches of the science and art of coal mining called for by the Board of Examiners who grant the certificates of competency. In each district there will be held two to four classes in different places, each class meeting two nights a week. If the teacher cannot overtake all the work in the district, he will have local assistants. Any intending students must possess a working knowledge of simple English composition and of arithmetic up through decimals and fractions. For such applicants as are deficient in these two branches, preparatory classes under a supplementary teacher will be held wherever there is a coal mining class if the number of deficient applicants warrants it. These schools will begin November 1st and continue to within a week of the examinations, which are usually held about the first of July, with the exception of two weeks at Xmas.

Transference of Instruction.

The schools for stationary engineers, which were conducted by the Mines Department heretofore for such persons as desired to obtain Government certificates of competency, were also transferred to the Department of Technical Education. For this year, they are to be held in any coal mining centre where there are ten or more applicants. The same educational requirements apply to these classes as to the coal mining classes, and deficient applicants are to attend the same preparatory classes in English and arithmetic as the coal miners.

Advantages of Motor Drive in Machine Shops

By W. J. B. Drew

MUCH has already been said and written on the subject of motor-driven machine tools, but the following remarks may not be out of place in keeping the many advantages of the electric drive before the minds of manufacturers.

The convenience, ease of control, ease of access to machinery, flexibility and elasticity of system, healthy conditions and adequate lighting obtainable, increased production and low cost of maintenance are reasons which should never be lost sight of for adopting the electrical rather than the mechanical system.

Can Cost be Reduced?

In the mechanical system the amount of power which is wasted in a large shop in order to drive the countershafting and belts is astonishingly large, and often not more than 50 per cent. of the power given out by the engine is employed in useful work performed by the machine tools. With the electrical system the amount of countershafting is very considerably reduced and very much less power is wasted. The engine can be used to greater advantage on account of the greater efficiency of the system. For example, suppose that the efficiency of the mechanical system is 50 per cent., and that of the electrical system 75 per cent., and suppose that there is a plant driven mechanically by a 1,000 h.p. engine. This engine delivers 500 h.p. to the machine tools, but when the plant is changed over to the electrical system, 750 h.p., or an increase of 50 per cent. is supplied to the machine tools, on account of the greater efficiency of the system.

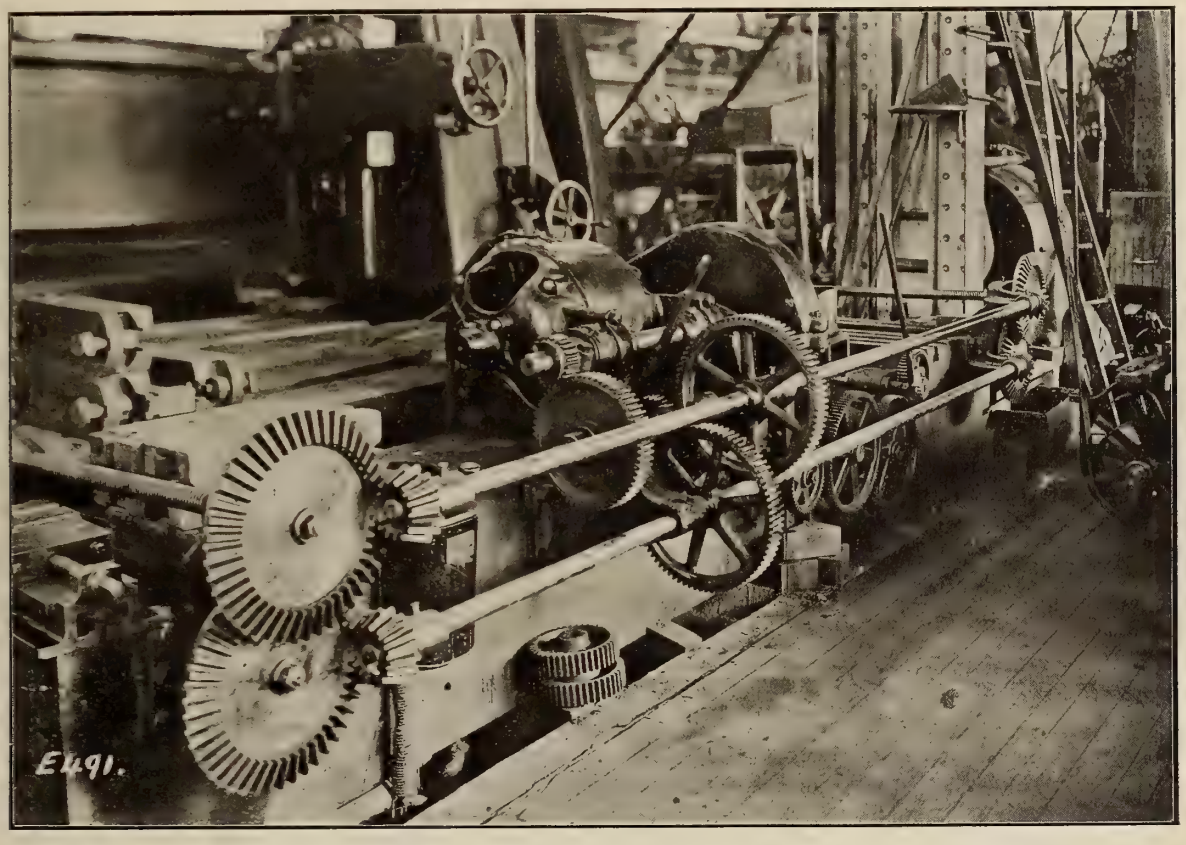
May Drive Machines in Groups.

When machines of the same class are likely to be needed for overtime working at the same time, they can be satisfactorily driven in groups. The system of group driving has the advantage of being cheaper than independent driving and less attention is required on the part of the electrician, for the reason that a smaller number of motors are to be looked after.

The Economy of Space.

In independent driving a machine is quite independent of all other tools. It can be easily placed, if desired, in a remote part of the shop at a considerable distance from other machines, whereas in the mechanical drive the long line of shafting necessary would often make this practically impossible. The motor can readily be mounted on a wall or ceiling by turning the end shields through 90 deg. or 180 deg.

In the laying out of new shops an overhead construction can be used which is lighter than that required for a mechanical drive, on account of the less amount of shafting and belts required. No special foresight is necessary in consideration of future extensions or additional machinery which may be installed, as cables can easily be led to any desired point. In the mechanical system, the addition of machinery may mean the reorganization of a whole shop, on account of the difficulty in the power transmission lines, and the want of flexibility of the system.



Boring Mill Driven by Direct Current Motor.

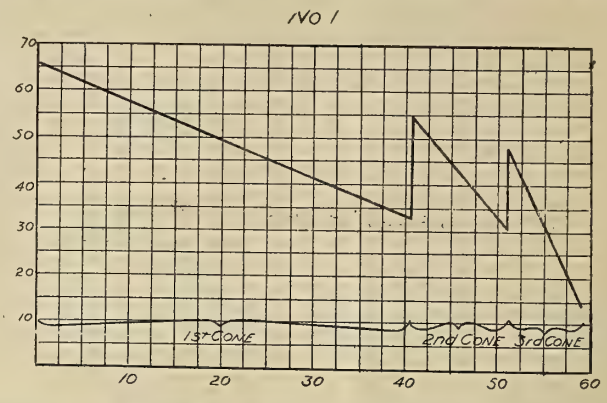
Makes Handling of Materials Easy.

The absence of belts greatly improves the conditions of crane service and the facilities for handling material.

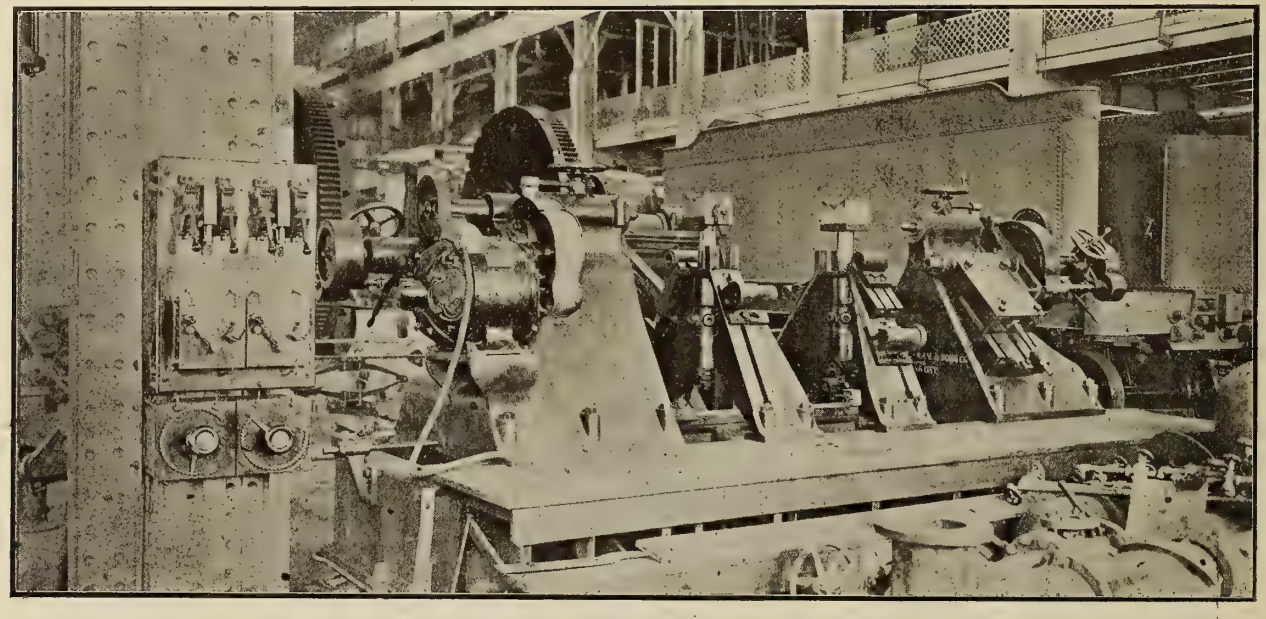
In the mechanically driven plant injury to any one particular part often means the shutting down of the engine and interruption to the work of the entire shop. There is more chance of leakage from steam pipes than there is of injury to cables, there are fewer countershaft bearings to be looked after, and the cost of maintenance is lower in the electrical system. Men work under brighter and healthier conditions, and therefore do better work.

The reason which will probably appeal to the manufacturer more than any other for adopting the electric drive, is the increase in production which can be obtained. In the mechanical drive either a nest of gears or stepped cone pulleys are used in order to obtain the different speeds, and when changes of speed are constantly required considerable time is necessarily lost in changing these gears or pulleys. With the electric drive only a fraction of the machinist's time is taken up in moving a controller handle in order to obtain a change in speed, and also a far larger number of speeds is possible.

that the electric motor of to-day is very different from the motor of ten years ago. Of a sturdy and rugged construction,



mechanically strong and electrically efficient, it is admirably adapted to meet severe service conditions without requiring special care. The bearings are self-oiling and the wells can be filled with oil to last a long time, and closed by means of tightfitting covers.



Quartering Machine for Boring Crank Pins, Driven by Direct Current Motor.

The Maximum Production.

The highest possible speed can always be used in order to give maximum production, the limit of speed being reached at the burning point of the cutting tool. It has often been found that production has increased from 25 per cent. to 30 per cent., owing to the adoption of the electrical in preference to the mechanical drive.

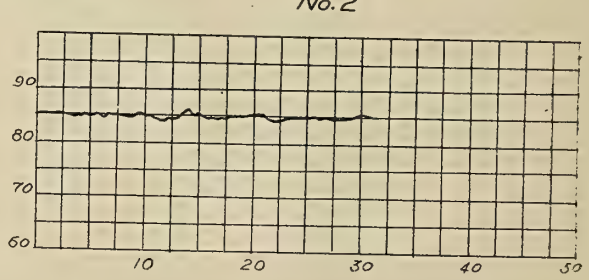
The accompanying curves which were plotted from a test on a 72-inch lathe will illustrate this. They show the cutting speeds and time taken to face a cast-iron disk from a 72-inch to a 6-inch diameter; Curve No. 1 being for a mechanically driven and Curve No. 2 for an electrically driven lathe. It will be seen from Curve No. 1 that the pulleys were not changed so as to obtain maximum cutting speed, whereas in Curve No. 2 during the whole of the time the maximum cutting speed and consequently the maximum production was obtained.

In one case the work was accomplished in 59 minutes, in the other case in 31 minutes, a gain of 90 per cent. in favor of the electrically driven tool.

In conclusion, the manufacturer will do well to remember

Some Advantages.

The alternating current motor is especially suitable in cases where constant speed or a limited number of fixed speeds are required. It is well able to stand the momentary overload which occurs at the quick reverse on such tools as planing and slotting machines. It can be supplied with a



"squirrel-cage" armature, and without brushes, slip-rings or commutator, and in consequence can be installed without fear of danger in such places as powder mills, where the least

spark is a source of apprehension. It will work well under the most trying conditions of dust and dirt. It can be stopped dead without fear of injury, and the speed will not increase sufficiently to cause injury if the circuit is opened. In the case of a direct current motor if the field circuit is opened, it is quite possible that the speed of the motor will increase to such an extent that the motor and the machine will both be seriously damaged.

Place of Direct Current.

The direct current motor is especially suitable for variable speed work. It also can carry large overloads, and can be reversed with practically no sparking at the brushes. It is well ventilated, and when necessary it can either be totally enclosed, or supplied with perforated hand hole covers to give protection from flying particles.

The new commutating pole variable speed motor is especially suitable for the independent drive of a machine tool which requires a wide range of speed. The motor will run equally well in either direction, and sparkless commutation at all loads within the range is insured. The commutating pole motors can be operated at a higher output over a wider speed range, are particularly sturdy in construction and admirably adapted in every way for driving machine tools.

TORONTO BRANCH.

At the last regular meeting of the Toronto Branch Executive considerable discussion took place over the present situation in the power campaign as far as Toronto is concerned. The manufacturers of the city are vitally concerned in securing cheap electric light, heat and power, and it is felt that the city should take the necessary steps for providing a municipal power plant of its own at the earliest possible date.

With this end in view the Branch is of the opinion that the ratepayers must carry a by-law authorizing the city to construct a power plant which will enable them to supply power to certain sections of the city, to begin with, and it will support such a by-law at the January elections.

Viaduct Question.

While the Branch is entirely in favor of a viaduct which will provide for the elevation of the main tracks along the Esplanade, it is opposed to any plan which provides for the elevation of all tracks on the Esplanade, including sidings into existing factories and service tracks which are now on the level.

The raising of all sidings and service tracks seems unnecessary, and if a plan of this nature were carried out, as has been proposed by the city, it would drive many firms along the Esplanade out of business on their present sites, and would seriously hamper all the others.

The Branch is, therefore, watching the viaduct question carefully with a view to protecting the interests of its members who are situated on the Esplanade.

MONTREAL BRANCH.

The Montreal Executive Committee have been giving careful attention for some time past to the subject of Workmen's Compensation in the Province of Quebec, especially since the appointment of the Labor Accidents' Commission by the Quebec Government. After going into the matter thoroughly and after consulting with some of the prominent members, a memorial was drawn up embodying the views of the Committee and presented to the Labor Accidents' Commission on November 5th. Before presentation, this memorial was sent to all members of the Montreal Branch, asking them for their opinion thereon and suggesting, further, that any members who did not agree with the stand taken by the Committee should appear before the Commission on their own account to present their views. So far the only replies received have endorsed the stand taken by the Montreal Executive on this question.

An informal dinner was held by the Montreal Branch in the Canada Club on November 5th, when over 100 people were present. The affair proved one of the most successful in the history of the Branch. Among the speakers were Rev. Dr. Johnston, who spoke from personal knowledge of the Japanese question; Hon. Alphonse Desjardins; Mr. A. W. Donly, Canadian Commercial Agent to Mexico; and Dr. Howard T. Barnes, of McGill University. The feature of the evening was the presentation of a handsome cabinet of silverware to the Montreal Secretary by the officers and members of the Montreal Executive Committee.

The regular monthly meeting of the Executive Committee was held on November 7th, when a number of matters were considered. A unanimous resolution was passed favoring the abolishment of tax exemptions in the City of Montreal.

A NEW FREIGHT ROUTE.

Up to the present there were two routes for carrying freight between Europe and British Columbia. Goods might be loaded on a boat at some European port, conveyed across the Atlantic and transported across the continent by the C.P.R., or they might be put on board a vessel and taken by a through route around Cape Horn, and discharged at a British Columbia port without transhipment. The cost of the latter method of transportation regulated the cost of the former. The long rail journey is expensive, and for some low-priced commodities is altogether impracticable. It provides, however, a much more rapid service, and for that reason gets a large amount of business of high-priced goods, where early delivery is a consideration.

A third route has just been completed, which will be watched with great interest. While the Panama Canal was being discussed and tossed back and forth between different sets of statesmen and engineers, a work was being carried on on the Central American Peninsula, in a part much farther north than Panama, which may be of tremendous importance in its relationship to the transportation problem of North America. The Tehuantepec Railroad was built. To appreciate what this means, take a map of Central America and measure the distance between Coatzocoalcos, or Salina Cruz, the termini of the railroad, and the line of the Panama Canal. This is looking many years in the future. But assuming the final completion of the canal, it will be found that on a trip from Liverpool to any port in North America on the Pacific coast, a saving of fifteen hundred miles will be made by the railway route over the canal route. Yet the railway is so short that it just constitutes a six hours' run. Over the present route by Cape Horn there is the whole circumference of South America.

The problem, then, is the relative cost of the water route to the Atlantic sea-board and across country by rail, occupying as it does the minimum time and including one transhipment and a long rail haul, the all-water route by Cape Horn, occupying the maximum of time, but with no transhipment; and the intermediate route by water to the narrow neck across Mexico, then by rail to the Pacific coast, and again by water to destination. The latter course would save weeks over the all-water route, and the cost of the transportation by rail would be very low, since it is just a couple of hundred miles across. It entails transhipping from boat to cars and again from cars to boat. It is stated that the harbor facilities are unrivalled, and that any boat can be loaded or unloaded at any time with no delay. If this were not so, much of the saving might be counterbalanced by stoppages at the harbors.

Shippers and the Railways

Some Features of the Transportation Problem

TWO EXPERIENCES WITH FREIGHT CLAIMS.

A CAR of building material was shipped by a manufacturer in Ontario to a builder in a town about a hundred miles away. The shipment was made on November 22nd, but did not reach its destination till about the middle of December. In the meantime the customer had finished his work and left the town. The consignors were compelled to make arrangements with a man in Windsor, which is thirteen miles distant, to unload the car at the town to which it had been destined, haul the material to Windsor and store it for the winter. In the meantime, while those arrangements were being completed, the railway company charged up a bill of $9 demurrage on the car. This the shippers were compelled to pay.

No remarks that could be made would add anything to the bare recital of the facts. Such a conglomeration of inefficient service and gross injustice in the application of the demurrage rule is a spectacle for the gods to see and wonder at. It might be thought that such a palpable exhibition of unfairness would be rectified by the railway company as soon as complaint was made. Not so. The occurrence recited above took place on the Grand Trunk Railway in 1905. The claim was at that time filed with the Claims Agent, where it remains to this day.

The incident is not unique. The same manufacturer shipped a carload of material to a town in Ontario. Through the admitted mistake of a railway agent the car was sent on to a town of a similar name in Quebec. After the shipper had gone to considerable expense in telephoning and telegraphing the car was located and sent to the right address. The railway company demanded $28 extra freight charges for bringing the car back from Quebec. The consignee was in urgent need of the goods and was forced to pay the amount. He charged it back to the manufacturer with an additional charge of one dollar for car demurrage.

In view of such occurrences as these we are not surprised that the public is not overly well-disposed to the railways. What would otherwise be considered irritability on the part of shippers takes on an aspect of positive patience and self restraint. How long are these things to be endured?

ATTEMPTS TO SHIFT RESPONSIBILITY,

THE railways have from time to time announced through the daily press during the last year that the shortage of cars and the congestion at large terminals was almost entirely due to merchants and shippers. The statement has also been made to the Board of Railway Commissioners, at different times.

The Dominion Millers' Association has made a complaint that discrimination has occurred at Owen Sound and other lake ports in the distribution of cars for shipments of wheat. At the hearing before the Board of Railway Commissioners at Toronto, on November 6th, Mr. J. Osborne, Superintendent of the Canadian Pacific, asked permission to make a statement. He took occasion to reiterate what was said by another official before the Board at a hearing in February last, viz., that the public were largely responsible for the shortage of cars and for congestion generally.

This statement was made at a time when it was well known to the Board that the railways were unable to give any reasonably satisfactory service, and as a result shippers all over the country were suffering heavy losses. The terminals at large traffic centres were so blocked, owing to lack of power and other proper facilities, that it was almost impossible to have cars placed for unloading. In fact, it has been known that consignees have had to wait six weeks before they could get their cars placed for unloading. This condition extended more or less through the spring and early summer, and so far as Montreal is concerned has been the situation up to the present time. It is stated that hundreds of cars have been delayed there on account of lack of proper transportation facilities, contributing largely to the shortage of cars, which the carriers are attributing to the shippers. It is unfortunate that if it is found necessary to make such statements both sides of the case are not stated.

The attention of the Board of Railway Commissioners has been drawn to this condition of affairs and a request made for a thorough investigation of the railways in Eastern Canada in the same manner as was done with the Canadian Northern, the result of the investigation to be made public in order that the blame may be placed where it properly belongs.

The Railway Commission appointed an expert for this purpose some time ago, but so far it would seem that his time has been taken up in the Northwest.

The Canadian Manufacturers' Association have realized that the railways have been working under a great disadvantage for some time past, and they accepted the situation as it presented itself. They now feel that broad statements of this kind, involving as it does every manufacturing interest in Canada, should not go unchallenged.

Hundreds of thousands of dollars have been spent in increasing plants and storage facilities in order to take care of the increased business offering, and as a result it can be said without hesitation that no interest in Canada has lived up more closely to the car demurrage rules, whereby an extra toll is permitted to be charged when cars are delayed in loading or unloading. Furthermore no interest has suffered more as a result of the delays of all kinds directly attributable to the carriers.

It is, therefore, the duty of the Railway Commission to thoroughly investigate and advise the public as to where the blame should be placed.

WILL THE REMEDY BE APPLIED?

RAILWAY equipment and inadequate facilities have been dealt with by the Railway and Transportation Committee for some time past. Information was furnished the Railway Commission in regard to shortage of cars, delays in transit, and in placing cars for unloading after arrival at destination. The Commission in March last appointed to its staff a former railway official, expert in operating, to investigate the numerous complaints. His first report concerned the Canadian Northern Railway. It summed up as follows: The Canadian Northern Railway Company has failed to provide adequate and suitable accommodation;—

The supply of motive power and cars is inadequate.

More roundhouses and repair shops are necessary.

The railway has not the proper equipment with which to keep the tracks clear in the winter.

There is no systematic organization in connection with the operation of its train and train service.

Details of the report were given to the daily press by the Commission on July 8th last.

Nothing was heard of the other two principal lines of railway until November 26th, when it was given out by the Board that the Operating Assistant had made a report to the Board on October 12th as to the conditions found on the Canadian Pacific Railway in the West. It shows that the C.P.R. failed to give adequate and suitable accommodation for the receiving and handling of traffic without delay at its stations.

That the company has failed and still continues to fail to furnish the necessary equipment to move freight at the stations investigated in the West.

That there is required additional facilities such as roundhouses, repair and machine shops, additional yards, sidings and warehouse accommodation.

It is probably to some extent gratifying to know that the complaints filed have been fully substantiated, but unless there is some guarantee of improvement there has been very little gained. We know what we have suffered. Is there any likelihood of its being repeated? What about the lines in the East? Are they to be investigated? Statements have been made that shippers have been to blame for much of the shortage. The Commission should investigate and put the blame where it belongs; and what is more, order and put in effect some remedy.

A SHIPPER'S COMPLAINT.

The letter from a shipper complaining of the treatment accorded him by the railways, which is reprinted in this issue, is indicative, says The Railway Age, of the attitude of a considerable portion of the public toward the railways, which to a very considerable extent is justified. While the incident recited is relatively an exceptional one, yet the aggregate of such occurrences wherein inefficient, indifferent or impudent subordinates give patrons cause for complaint of this character is large. The claim department is to blame for much of such trouble because of the dilatory way in which large percentages of claims against railways have been handled. The greater number of such grievances would be avoided were it possible for responsible officials to handle all of the details of their business, or even if what appear to be well-founded complaints or claims could be brought to the attention of the higher officials promptly. The condition is recognized, and on many roads there is being made a determined effort to find remedies for past abuses and devise methods of handling the business which should result in the removal of the cause of many such complaints in the future. The railways, as a whole, wish to pay all proper claims against them and to avoid practicing extortion on patrons, but to secure these ideals it is necessary that there be a campaign of education among employees.

Under the caption "A Railroad Experience," The New York Post printed in its issue of November 9 a communication signed "W. H.," which was as follows:

Injured Innocence.

"Few spectacles of injured innocence are more touching than the pathetic air and attitude with which the managers and controllers of our great railroads announce their awakening to the discovery that the people 'seem to have a grudge against the railroads.' They don't seem to be able to understand it, and incline to attribute it altogether to the proverbial ingratitude of the populace. Possibly a recent well-authenticated incident may serve to throw some light upon this feeling.

"I had occasion to transport my library from the Pacific to the Atlantic Coast. On consulting the local freight agent as to rates, the shipper was shown a copy of the published tariffs now required by the interstate commerce commission, and informed that upon second-hand books he was entitled to a rate of $1.85 per 100 pounds. He accordingly shipped some 3,000 pounds of books at that rate. On being notified of their arrival in New York he sent down an expressman to get them, prepared to pay a bill of a little less than $50; but to his astonishment, the expressman returned with a bill demanding one hundred and twenty-odd dollars. He promptly visited the freight office in person and explained the situation, but was curtly and insolently told that he could pay the $120 charge or go without his books. When he asked to be allowed to take a desk, containing valuable papers, and a chair, which had been shipped with the books, but as "furniture," and prepaid, he was refused these also, until he had paid the entire bill. He threatened to carry the matter up to the general freight office, upon which he was offered a reduction of the charges from $120 to $90. He refused this, and went in person to the head clerk of the freight department of the road. The latter gentleman hemmed and hawed for some minutes, then, after keeping him waiting for half an hour, came back and admitted that the charge was based on no bill of expense received from the western road, but merely on the highest first-class furniture rates. He pleaded entire ignorance of the true rates, had no book of tariffs, except the westbound, which he said were different from the eastbound for the same goods, and must refer the shipper to the agent of the western road.

"To him accordingly the shipper went, and was promptly advised by him to pay the full amount charged, and then make demand for a rebate afterwards. He also professed ignorance of the proper rate, and of any knowledge of a lower rate upon books than upon household furniture. Fortunately, the shipper happened to recall the printed volume of tables, and demanded to be shown this. There, upon the first page, was the rate for which he had been contending. The agent grinned sheepishly, turned to his stenographer and dictated a letter, requesting the eastern railroad to deliver the goods at the rate specified, which was accordingly done. The moral is obvious. It distinctly recalls the celebrated, but promptly repudiated, remark of the late Collis Huntington, that the freight rates on the Southern Pacific were "all that the traffic would bear." It is also significant of the value of the requirement by the interstate commerce commission that freight tariffs should be printed and accessible on demand of the public.

"The same library had, in the health migrations of the shipper, been sent across the continent to the North Pacific Coast, and from the North Pacific Coast to the extreme south within a few years, and in both instances at full 'household goods' rates, no agent ever having revealed the fact of a lower tariff on books. Not merely 'all that the traffic will bear,' but all that a shipper can be bullied or cheated into paying, would seem to be the rule of the roads."

NOTIFICATION OF CHANGES IN FREIGHT RATES.

The Railway Act, Chapter 37, R.S.C., 1906, says: "No tolls shall be charged by the company (railway company) until a by-law authorizing the preparation and issue of tariffs of such tolls shall be approved of by the Board of Railway Commissioners.

The tariffs of tolls which the company shall be authorized to issue under this Act for the carriage of goods between points on the railway shall be divided into three classes, namely:

(a) The standard freight tariff.
(b) Special freight tariffs.
(c) Competitive tariffs.

Every standard freight tariff shall be filed with the Board and shall be subject to the approval of the Board.

Upon any such tariff being filed and approved by the Board, the company shall publish the same with a notice of such approval in such form as the Board directs in at least two consecutive weekly issues of the "Canada Gazette."

Special freight tariffs shall be filed by the company with the Board, and every such tariff shall specify the date of the issue thereof and the date on which it is intended to take place.

When any such special freight tariff reduces tolls previously in force, the company shall file such tariff with the Board, and shall for three days previous to the date on which such tariff is intended to take effect, deposit and keep on file in a convenient place, open for the inspection of the public during office hours, a copy of such tariff.

When any such special freight tariff advances the toll, the company shall in like manner file and publish such tariff ten days previous to the date on which the tariff is intended to take effect.

Upon any such freight tariff being so filed, the company shall until such tariff is superseded or is disallowed by the Board charge the toll or tolls as specified therein; and such special freight tariff shall supersede any preceding tariff or tariffs so far as it reduces or advances the tolls therein."

As regard competitive tariffs the same conditions apply, except that when it may be necessary to meet the exigencies of competition, or as the Board may deem expedient, the Board may make rules and regulations governing the filing and publication of such tariffs, and may provide that any such tariffs may be acted upon and put in operation immediately upon the issue thereof by the company, before they have been filed with the Board.

These are the conditions which apply to the filing and publication of freight tariffs at the present time. It will be observed that standard tariffs only require the approval of the Board, special freight tariffs have only to be filed, and provided the conditions of the Act are complied with, become the legal tolls until otherwise ordered. Once the tariff is regularly published and filed with the Board it is no longer the rate imposed by the carrier but the rate imposed by the law.

Should the tariff prove onerous, a complaint, setting forth the objections, must be filed with the Board, and this will be heard in due course. In the meantime the carriers are permitted to charge rate as filed.

The Fixing of Rates.

The Canadian Freight Association, an organization representing all of the railways in Canada, agree upon certain changes, advances or otherwise, in freight tariffs or classification. These changes are duly filed with the Board in accordance with law, publicity given as provided for in the statutes, but the public have no general knowledge of the changes until they actually become effective. The Act, therefore, does not afford the public the protection which, no doubt, was intended. It frequently occurs that rates are advanced without the public having any previous knowledge, and are thus unable to meet the changed conditions. The same publicity should be given to changes in rates as in other matters affecting the carriers. As an illustration: In the construction of branch lines, four weeks' notice must be given in some paper published in each county or district through which the branch line is to pass, or if there is no paper there, in the "Canada Gazette." A change in rates or classification is of equal importance to the shipping public as the construction of branch lines. An amendment to the Act providing for thirty days' notice in cases of advances in rates and ten days' in reductions, notice of the changes to be published in the district or territory affected, would obviate the present difficulties.

TORONTO INTERSWITCHING

THE complaint on behalf of the Toronto Branch, filed with the Railway Commission in April last, was heard in Toronto on November 5th, before Chairman Killam, Honorable Mr. Bernier and Dr. Mills, the full Board of Commissioners. There were five other complaints re interswitching set down for this hearing. Mr. J. E. Walsh, Manager of the Transportation Department, appeared for the Association and other complainants. Mr. Biggar, K.C., and Mr. Cowan, K.C., appeared for the respondents, the Grand Trunk Railway, and Mr. McMurchy was present on behalf of the Canadian Pacific Railway.

The complaint sets out that the manufacturing interests alone represented in the petition had some seventy-four sidings within the city limits of Toronto provided for freight purposes, that a great deal of this freight consisted of low grade commodities which could not be crated, that the railway companies had encouraged manufacturers to locate within Toronto terminals at suitable points, that for the last fifteen or twenty years the railways had granted Toronto rates to and from all sidings, namely, Toronto rates applied to and from all sidings within Toronto terminals, on all traffic originating in or consigned to points outside the limits.

On March 1st last the respondents withdrew from this arrangement in so far as it applied to what they termed "local" or "non-competitive" traffic, that is, traffic originating at points not served by another line of railway. On such traffic Toronto rates through to destination are now refused, and an additional toll for the service of the connecting line is demanded. They also refuse to deliver the traffic to their connections unless the consignee prepays or guarantees the additional charges.

The respondents admitted the only notice of change in rates was given by telephone on or about the date mentioned.

The respondents still continue to apply Toronto rates through to final destination on such traffic as they term competitive, namely, such traffic as may be shipped by another line.

It was submitted that the action of the Grand Trunk was in violation of the discrimination clauses of the Railway Act. It was pointed out that the ultimate effect of these changed conditions would be serious to certain industries, and that it opened the door to favoritism and rebates. At present the consignee has no positive knowledge as to what he might have to pay. Some are charged Toronto rates and some are held up and compelled to pay additional charges.

A number of witnesses were examined in support of the complaint. The Grand Trunk claimed the right to discriminate between so-called local and non-competitive traffic and competitive traffic. On the former traffic they were not willing to pay the expense of delivery on another company's tracks, whereas they stated that as regards competitive traffic railways generally encouraged it to the utmost of their ability. They were, therefore, justified in making lower rates to this traffic, simply because it could be hauled by another line of railway.

The position taken by the Association's representative is that the Railway Act does not give the carriers the right to declare certain traffic non-competitive simply because it originates at a point or in a territory where there is only one

line of railway, and to decline to grant through rates as provided for in Section 271, Railway Act, 1903.

The Board alone may declare what is competitive or non-competitive, and the competition must be only enjoyed with due regard to the interests of the public.

A Consideration of Distance.

When traffic which originates at a point outside the limits of a traffic centre is consigned for delivery at a certain point, if there be proper facilities to reach that point, it should be delivered there at a through rate related to the whole distance which it is carried. The fact of the carrier having certain terminals near the destination of the consignment should not oblige the consignee to accept a part of his freight there at a loss, nor should it prevent him from getting all his freight where he wants it at a through rate, no matter whether the junction point of the two roads be within terminals or twenty or fifty miles away. Whilst the service of the connecting or delivering line may be a terminal one, entitling it to an arbitrary, that fact is no concern of the public, but rather a matter of division between the carrying companies which the Board has power to regulate in the absence of agreement.

The latter service is a transportation one in the same manner as that which the initial line performs, forming part of a through service in so far as the public is concerned, whether a switching engine is used or not by the connecting carrier.

Counsel for the Canadian Pacific asked permission to submit a brief, which was granted; at the same time the chairman stated that if it was not filed within ten days the Board would not wait any longer.

It is hoped that the Commission will give an early decision in this as well as other switching cases which have been before the Board for some time, and which will, no doubt, have a direct bearing on the question of interswitching generally throughout the Dominion.

TRADE WITH NEWFOUNDLAND.

The following report on the trade of Canada with Newfoundland has been made by E. D. Arnaud, Canadian Trade Commissioner to that country.

The following figures showing the totals of the imports and exports of the colony with the undermentioned countries have now been completed for the year ended June 3 last:

	Imports.	*Exports.*
Great Britain	$2,669,934	$1,492,795
Canada	3,669,098	1,611,480
United States	3,447,359	1,394,289

while the total imports from all sources were $10,426,040, on which the duties collected amounted to $2,354,056, and the total of exports to $12,101,161.

A comparison of these figures with those of the previous year show the following results:

	1906	1907
Total of Imports	$10,414,274	$10,426,040
Total of duties	2,319,986	2,354,056
Great Britain imports	2,651,196	2,669,934
Canada imports	3,521,969	3,669,098
United States imports	3,609,192	3,447,359
Great Britain exports	1,662,612	1,492,795
Canada exports	1,777,169	1,611,480
United States exports	1,278,997	1,394,289
Total of exports	12,086,276	12,101161

It will be noted from the above figures that Canadian trade increased $147,159, while that from the United States declined $161,833 during the same period.

The figures on the whole show that trade has been well maintained, and that the revenue from Customs duties has increased some $34,000 over that of the previous year.

Later on, when the returns have been printed and laid before the Legislature, probably in February or March next, it will be possible to go into the details of the figures given above, and so ascertain how far they affect the various items that go to form the total of Canadian trade with this colony.

NEW CASTING MACHINE.

Thomas H. Churchill, of Toronto, has obtained letters patent for an improved casting machine, and he has assigned one-half of it to James Scroggie, of Toronto.

This invention has for its object to provide an improved casting machine which is very simple in construction, and by the use of which it is possible for inexperienced labor to join the rails and fillings of the sides and ends of a crib or the head and foot of a bedstead quickly and without any reasonable possibility of making a mistake in the joining operation.

The invention consists of a casting machine comprising a set of molds, consisting of two groups of separable mold members, means for maintaining the groups of mold members relatively to each other, and for collectively separating and bringing them together, means for moving the molds into horizontal and vertical positions, and means for collectively revolving the molds in their horizontal and vertical positions.

A NEW FUEL FROM REFUSE.

There are at present three modes of disposing of ashbin refuse:

(*a*) Consumption by fire in refuse destructors;

(*b*) In dressing land, either with crude or pulverized refuse;

(*c*) By tipping at refuse heaps.

Mr. H. G. Coales, A.M.I.C.E., the Town Surveyor of Market Harborough, has invented a fourth method, viz.: its consumption in ordinary boilers (or other manufacturing processes) after undergoing a new process. On the face of it this may seem difficult and insanitary, but when the crude ashbin refuse has been converted into "Coalesine Fuel"—as Mr. Coales has named the neat-looking briquettes—one forms a different opinion. The new fuel is made of pulverized ashbin refuse mixed with tar, or tar and pitch, and pressed into briquettes or cakes. The process converts the offensive and untidy ashbin refuse into a deodorised, marketable, and cheap fuel, which may be stored in confined situations without nuisance, and consumed in ordinary boilers.

The cost of putting up a plant to make "Coalesine Fuel" would be very much less than the installation of a refuse destructor, and quite within the reach of the smaller local authorities, who at present generally dump down their refuse in pestilential heaps outside the town.

It would be a great advance in sanitary practice if all ashbin refuse could be consumed by fire; but the idea is, perhaps, not likely to be realized unless it can be done without loss. There seems little doubt, however, that it would be a profitable process. The best refuse destructors in large towns, burning crude refuse, show satisfactory results; from which it is evident that by the addition of so good a fuel as tar the results could not be less favorable in the case of the new fuel. The invention seems to be on the right lines both from a sanitary and commercial point of view. Its development will be watched with interest.

System Applied to Factories

By C. R. Stevenson, Miller & Franklin Co., Business Engineers

THE natural aim of all manufacturers is to secure as large a profit as possible on the capital which they have invested. To do this, means that all of the different factors entering into the securing of such a profit must be handled in the most efficient way possible.

In the early stages of a factory's existence, the various details incident to its operation can be handled personally and efficiently by the chief executive.

As time goes on, and the factory increases in size and complications, the executive finds that he must entrust many of the duties he has hitherto performed himself to others; that it is impossible to keep in close personal touch with all of the details.

System Necessary as Business Increases.

The necessity of an organization and of trusting to records and reports for knowledge of what is occurring becomes recognised. It is now that a system of some kind becomes an absolute requisite if the business is to continue. Gradually some sort of a system, more or less efficient, more or less elaborate, grows up. On the efficiency and completeness of this system the success or failure of the factory now depends. That so many factories fail shows that the majority of these self-made systems are inefficient. That so few factories attain the maximum success possible shows that the really adequate system is a rarity.

Up to a few years ago the working out of the system was left wholly to chance. It was handled in the odd moments when there was nothing else to do. Gradually, however, the necessity of proper methods, of accurate and detailed knowledge of every phase of the situation, of obtaining a maximum percentage of efficiency from the human and material equipment, forced itself more and more to the attention of the leading factory managers.

Much careful thought and study was given to the subject, and notable improvement began to be brought about. A new profession was developed, devoting itself solely to the study and solving of the problems of factory organization and systematization.

To-day the factory manager desirous of obtaining the best results from his factory can call to his aid the services of any one of several experts who are devoting themselves solely to the handling of these problems.

A Possibility of Too Much System.

In many cases the desire to systematize led to overdoing. No matter how good a thing is, there can be too much of it. Many factories went several steps beyond the system necessary. They burdened themselves with red tape, circuitous methods, excessive clerical force and unnecessary detail. Naturally they suffered. They blamed their sufferings to system, forgetting that there is good system and bad system; that a proper and reasonable amount can not be gotten along without, but that an excess is fatal.

Many men without training, experience or knowledge attempted to do the work that requires an expert. Naturally the results were bad. Again system was blamed, but it was not the fault of system. There is nothing easier to go wrong on than system, nothing requiring more careful thought, more intelligent planning, more tactful carrying out.

Right system is simply the application of common sense, knowledge and experience. No factory can run without some system. No factory can run with the maximum efficiency without a right system.

Things to Know.

The man who is running a factory in the best way must be assured that his purchases are being made in the right way and at the lowest prices, that deliveries are made as needed or promised, that material as received is properly checked, stored and issued; that no undue waste is developed as it passes through the factory; that the money invested and tied up in material is not too much, and that, at the same time, an adequate supply of all needful material should be on hand at the right moment, thus preventing needless delays.

He must know the efficiency of every man and every machine per labor hour and machine hour. He must keep track of all delays and the reasons for the failure to arrive at the maximum. He must have his plant operating on the most effective basis of wage payment.

He must have his organization properly arranged with a definite assignment of duty to each member of it. He must know that each member is performing his allotted work accurately, and whether or not he is keeping it up to date.

He must know the cost of every article which he produces in the three items of labor, material and expense. He must know the cost and accomplishment of each department into which his plant is divided. He must have proper methods of entering orders, and laying out production.

He must have his book-keeping proper in such shape that at any moment he can have drawn off a statement of assets and liabilities showing exactly where he stands. His selling organization must be so organized and handled that he knows at all times just what efforts each customer, prospective and actual, has had exerted on him to secure his trade. He must know the value of every salesman from the profit and loss point of view.

Finally, he should be in receipt of certain daily, weekly, monthly reports which will automatically bring all this and any other necessary or desirable information to his attention.

Simplicity Necessary.

All this must be accomplished in the simplest and most direct way, with the minimum of clerical labor. These are the questions which a right system covers and covers adequately.

In this article, the attempt has been made to show in a general way the necessity of system in a factory and what details a right factory system should cover.

In future articles an effort will be made to take up in some detail these necessities, and the general methods whcih have been found effective in handling them.

It must, of course, be remembered that every factory has special conditions, special needs, and that no blanket systems have yet been created which will cover these varying conditions.

Every factory is a separate problem, with its own special necessities, and should be studied separately, and a special system devised to cover its needs. There are, however, certain general conditions which must always be borne in mind, and these we will endeavor to present in our succeeding articles.

The Press and Otherwise

THE GOVERNMENT AS COAL MINERS.

The Government of Alberta is going into the coal-mining business, although there is no indication that they are going to adopt a general policy of public ownership of everything worth while. The case is explicitly stated to be exceptional. The Eagle Lake district boasts some coal areas which have been duly investigated by a mining engineer and pronounced workable. This section of the country lies forty miles from any surveyed line of railroad and is entirely barren of timber; in spite, too, of the dryness of the air, the Chinook winds, and other attributes of the salubrious climate in those parts, the thermometer gets so low in the winter that fuel is one of the essentials not so much of comfort as of existence. In fact unless a supply of coal is assured, the settlers will be compelled to forsake what is a fine wheat-growing district. Hence the Government have decided to start the necessary operations for the establishment of the mine, without delay.

THE WORKMAN HAS BENEFITED.

"Yes, wages have gone up," the average man will tell you in Montreal to-day, "and so has the price of everything you buy. Look at house rents; look at food and other necessaries of life how high they are." And the average man will clinch his argument by declaring that he is no better off than he was ten years ago. He is wrong, because even if he has not saved money his standard of comfort is higher and he is getting more out of life than was possible then.

It is not an easy matter to get at the true relation of wages to the cost of living—to work it out with mathematical precision, so to speak—but an attempt has been made by the United States Bureau of Labor, which has published an instructive bulletin giving comparative tables of recent increases in the cost of food and workmen's earnings, and these throw a flash of illumination over the subject.

While the economic conditions are not the same in Canada and the United States, there is a sufficiently close approximation in the standards of life among the working classes in the principal cities of the two countries to make the comparison interesting here. The statistics show that the average weekly earnings in four thousand representative establishments reported upon were 3.9 per cent. greater in 1906 than they were in 1905, while the retail cost of food purchased by the employees had increased by only 2.9 per cent. in the same time.

As there is nothing to offset the margin of one per cent. between the advance in wages and the cost of food, it is obvious that as the result of the increase in earning power the average worker was considerably better off in the United States last year than he was the year previous, so far at least as food prices govern the cost of living. But that is not all. While the tables show the proportional increases, they show also that there was an average reduction of one-half per cent. in the hours spent in labor each week.

When the comparison is extended from a single year to a series of years the improvement in conditions becomes more striking. The average weekly wage in the same 4,000 establishments was 18 1-2 per cent. in excess of the average weekly earnings during the closing decade of the last century. The increase in the retail price of food is shown to have been in the interval 15.7 per cent. The balance on the side of increased earning power in the period under review was nearly 3 per cent. It seems a fair conclusion to draw that upon the whole the working classes are appreciably better off to-day than they were ten years ago. Savings deposited in the banks confirm this, and no one who looks around intelligently can fail to perceive that the standard of living is better—food, clothing, house accommodation, and the facilities for education.—*Montreal Herald.*

A SUPPLY OF LABOR.

An interesting incident occurred at one of the mills of the Cornwall and York Cotton Co., recently. An Englishman, a comparatively young man, applied for work. On being questioned he said he had worked at Windsor, N.S., but was desirous of getting in the mills here. In response to a question as to his family he replied that he had thirteen children, the eldest eighteen years of age, and as the family had accompanied him and were waiting outside the door, he produced them for the benefit of his interrogator. Without further preliminaries the man and the three eldest children were given work in the mills, and are earning collectively $35 a week. They are comfortably housed and are happy and contented.

A REBUKE TO HATERS OF CAPITAL.

"Those theorists who have been carelessly denouncing capital as a public enemy will be forced to contemplate for a time how things are when capital runs short." A good many people in this and other countries will take a bitter satisfaction in the above reflection which the Montreal *Witness* gave utterance to a few days ago. The practice of taking a fall out of capital became such a pastime that it was a mean person or paper which could not take a slap at the capitalist as he passed by. The man who had enough money to start an industry had few friends. The more workmen he employed and the more money he put in circulation through the course of his business the more enmity he aroused. It never seemed to occur to these despisers of capital that without the man who was prepared to invest his money they would go hungry. What would become of the boiler-maker if the man who had the head to accumulate wealth did not erect a plant for the making of boilers? What of the carpenter, the mill-wright, the general mechanic?

The last few weeks have given the answer. There has not been enough capital to carry on the business of the country. Hundreds of men walk the streets of Hamilton; Toronto and Montreal are much worse off. The railway companies have dropped their construction staffs; so has the Bell Telephone Co. Lack of capital is most regrettable. To none is it more disastrous than to the workman. The present stringency, which it is hoped will be of very short duration, may help to restore a more rational sentiment toward capital, a sentiment that will recognize that the capitalist is of great benefit to the country, and recognizing this will hesitate about surrounding him with impediments which will discourage him from investing his money in works of development.

The capitalist has been the object of unreasoning attacks on all sides. Wherever a device has been found for instituting a tax on industry it has been promptly adopted. Yet there is an urgent need of capital in this country at the present time. We have natural resources on all sides waiting the magic hand of capital to turn them into active national wealth. A fair attitude towards capital will do the country no harm.

IT'S AN ILL WIND THAT BLOWS NO ONE GOOD.

A Western contemporary thus moralizes on the financial situation in the United States:

"There are thousands of people in the United States today who are lamenting the fact that they did not "put something by for a rainy day" when they had the opportunity. If as a result of the present depression which has overtaken the Republic to the south people will learn the value of thrift, what is now looked upon as calamitous will be regarded as a blessing in disguise. Wage-earners everywhere should take to heart this timely expression of opinion by one who bears the reputation of being a true friend of the laboring classes:

"'I never saved a dollar which I was not prompted to save as a matter of common sense. If a man assumes the duty of working he cannot shirk the responsibility of saving. He has not worked sanely if he has not saved a fair percentage of his earnings.'—John J. Mitchell, President of the Illinois Trust and Savings Bank."

REFUTES COMPLAINTS OF SLOW SHIPMENTS.

That general criticisms of Canadian manufacturers for neglecting export business and being slow in their deliveries are ill-founded or exaggerated is the claim of Mr. Alex. Saunders, of the Goderich Organ Co. The Canadian public have been treated to a steady line of complaints from some of our commercial agents for some time, until it has come to be believed that exporters are universally behind hand in their shipments. No doubt there are many cases in which these complaints are well founded. No one will condone the offence of those who neglect correspondence or deliver seasonable goods long after the selling season is over.

It is unfair, however, to draw general conclusions from isolated cases. For instance Mr. Saunders submits a letter which is "a sample of letters we have been receiving for the past seven or eight years." He adds, "We would just like to put ourselves on record as one of the firms who answer correspondents promptly, make shipments promptly, and are enjoying a good trade and pleasant trade relations in consequence." The letter is from an Australian house expressing satisfaction at the earliness of the delivery. Another letter received the same day, also from Australia, thanks the Canadian firm for its prompt attention.

It is a pleasure to record instances of this kind, which we believe are the rule rather than the exception. However, it is all the more necessary to impress on delinquents the necessity of giving prompt attention to enquiries from abroad. You may not want the business yourselves, but a failure to give satisfaction produces a bad impression against all Canadian manufacturers, and does almost irreparable harm to those who are making great efforts to develop an export trade.

THE WOOD-WORKING INDUSTRY.

Particulars of good openings for the sale of all kinds of wood products in Great Britain come to hand with every British mail. Dowels of all kinds, handles, chair stock, and various turned specialties are most frequently called for, but excelsior wood flour, pit-props, etc., are also enquired for occasionally. The apathy of Canadian manufacturers of these lines to such inquiries is induced partly, no doubt, by the great home demand for their products, but partly also by the low prices offered by British consumers. That there is a possibility of improvement in this last respect may be gathered from the following extract taken from a letter recently received from the office of the High Commissioner for Canada in London. Speaking of the general demand for wood products he writes as follows:

"Upon the other hand, there can be no doubt that opportunities in these markets lie mainly in goods for which an active demand exists, owing to their not being produced in the United Kingdom, and this applies with particular force to manufactures of wood of all kinds.

"It is quite true that at times values have sunk to an unremunerative figure, and that firms here when quoting prices are prone to quote figures which are absurdly low. It should, however, be remembered that this market must draw its supplies from some source or other, and if Canadian manufacturers can produce what is wanted here and hold out for reasonable prices, they are pretty certain to obtain them in the long run, because the countries that formerly sent large supplies over here are either exhausting their raw materials or need the manufactured output more and more for their own market.

"I shall at all times be happy to hear from any Canadian manufacturer who is in a position to deal with export trade in handles, dowels, chair stock and various other lines, because we can always place him in touch with a number of concerns in this country who are apparently anxious to form new relations."

The Canadian manufacturer of these lines may perhaps profitably turn to this field when his trade slackens down a little in the coming winter months.

A DESIRABLE TRADE OPENING.

Considerable interest is being aroused in the slate industry of Newfoundland. The quality of the slate being quarried at the Bay of Islands is said by experts to be superior to that of the famous Welsh slate. If a market can be found for it in Canada it will be of advantage to both countries. A mutual trade is desirable, and every product which Newfoundland can supply to Canada will make our chances of increasing our sales to the island colony so much the better. For sentimental as well as mercenary reasons the Canadian public will be interested in seeing this trade developed.

PROFIT-SHARING ON A FARM.

An interesting example of a form of profit-sharing which was in operation for many years on a farm in Germany is given in *Fühlings Land, Zeitung.* The farm was valued at $20,000, and the owner deducted in the first place from the net profit 5 per cent. on this sum for interest. The remainder was divided into 100 parts, which were shared in the following proportions: Owner, 50; manager, 20; book-keeper, 10; cowman, woodman and brickmaker, 4 each; head man, 2; and six laborers, 1 part each. According to the "Abstract of Labor Statistics of the United Kingdom," 1905-6, only one agricultural undertaking in which a profit-sharing scheme had been adopted was known to exist in that country on 30th June, 1906. The number of persons participating was 163.

PRIDE OF LABOR.

Adam Bede, in George Eliot's novel, is a carpenter, physically and morally stalwart, and he is proud of his calling. He loves work and is angry with his fellow workmen for flinging down their tools at the first stroke of the clock. To have seen his like now one must almost be an octogenarian. Honor has departed from manual labor. To do as little work as

possible, and to get the highest possible wages, is now the avowed aim—it might almost be said the pride—of the artisan. It may be, partly, that our system of popular education has raised the ambition of the laborer above his former lot. If that is so the change was inevitable, and the only cure for its evils would be some device identifying the interests of the workingman with that of his employer, so that he would feel that in working for the employer he was working for himself. No such blessed arrangement at present is in view. The only social revolution so far has been the other way. Even in the age of the Adam of "As you like it," the world of labor had oulived "the antique time when service sweated for duty, not for meed." It is only possible now so to arrange the meed that the sweating shall be less felt.—*Ex.*

BANQUET OF BOARD OF TRADE.

The progress which it is possible for a city to make when an aggressive body of citizens set out to accomplish it, is nowhere shown to better advantage than in the case of Peterborough. At the annual banquet of the Board of Trade of that city, held recently, the reason for its industrial activity in recent years was fully explained by the quality of the business men who give their attention to its industrial welfare.

The guest of honor at the banquet was Hon. J. D. Rolland, President of the Canadian Manufacturers' Association. That such was the case was no less an appreciation of the high position in the manufacturing world which Mr. Rolland occupies, than a recognition by the Board of Trade of the importance of manufactures in the life of Peterborough. Mr. Rolland discussed a number of the great questions which were pressing for solution in this country. He particularly referred to the need for cultivating a sentiment in favor of goods made in Canada. After speaking of the transportation problems of the country, he discussed at length the question of forest preservation.

Touching on the pulpwood problem he pointed out how lands in certain parts of Quebec were being laid bare to provide the raw material for the United States pulp mills. United States companies who have purchased limits in Canada are cutting away our forests to provide work for men in the country across the line. When the forests go, dry go the lakes and rivers that were once encircled by the forests.

Mr. Rolland advocated the manufacture of pulpwood in Canada, and referred to the advantages that would be forthcoming to Canadian labor providing we manufactured our own paper on this side of the line. Raw material for pulpwood is diminishing, and the demand from the United States is robbing us of our forests, and to preserve our pulp we must preserve our forests.

Mr. Rolland's address was received with great favor. Other speakers discussed various phases of the national life.

A BUSINESS EXCURSION.

The second of the series of excursions inaugurated by the Hundred Thousand Club, of Calgary, has just been successfully finished. The excursion train, consisting of a baggage car, four first-class day coaches and two standard sleeping cars, left Calgary at 9.30 a.m., October 30th, journeyed north, following out an extensive schedule, and arriving at the capital of the province that evening. Thanksgiving Day was spent in Edmonton and Strathcona, and the train started on the return trip Friday, Nov. 1st., at 8 a.m., visiting towns that were not called at on the going trip, and also taking a side trip on the branch line from Lacombe to Stettler, arriving in Calgary on the morning of November 2nd.

From thirty minutes to three hours was spent in the different towns, thus allowing the Calgary wholesalers to meet their customers in a social way. One hundred and seventy-five people took advantage of this exceptional opportunity to see the northern portion of the province of Alberta.

The first excursion visited the southern portion of the province on August 6th to 8th. The object of these excursions is to become better acquainted with the different districts tributary to Calgary, and increase as well as hold present trade done throughout these districts by the ninety-five wholesale houses located in Calgary.

AN IMPORTANT PUBLICATION.

An inspiring picture of the position of Montreal as an industrial and commercial metropolis is given in a recent Industrial Number of the Montreal *Witness*. Montreal occupies a wonderfully strong position geographically, situated as it is at the end of an unrivalled inland waterway system and at the beginning of ocean transportation. A view of the harbor in the summer will convince anyone of the immensity of the business which is carried on through this port. Ocean vessels belonging to five different lines enter its waters, while there is a procession of boats coming down from the lake ports. This natural position has been taken advantage of by manufacturers, financiers and other business men. The taxable and exempt property in the city is estimated at $254,648,998. The customs receipts last year amounted to $14,143,616. These are indications of the strength of the city. In population the city is adding to its numbers each year a city a large as Vancouver. Canadians have reason to be proud of the development of Montreal, and the *Witness*, containing an account of its many activities, will be a source of pleasure to all who are interested in the progress of the country.

ELEMENTS OF PROSPERITY.

Simmered down, future prosperity depends upon the crops and the railroads; the crops to feed the world and to create live stock and sustenance, and the railroads to make possible the movement of these products to market, and the transportation of manufactures and commodities to the interior.

The sooner these fundamental facts are understood and understandingly handled, the sooner will be recognized the basic part the railroads take in the structure of prosperity; instead of making them political and financial playthings, the sooner abiding prosperity will be with us, less subject to influences of the speculator and the demagogue.

The other contributor to the unwarranted financial disturbance at present getting the country by the ears, is the man who thinks it "wise to hang on to the money." He is the uninformed wage-earner, who knows little or nothing about finances; he is the suspicious man, who believes that everyone else has a streak of dishonesty in his make-up; he is the man whose avariciousness makes him afraid of his shadow, and whose lachrymose croakings are repeated with evident satisfaction, spreading distrust, and rolling up the amounts hidden away from the world, where they might do some good to the owner as well as to others in business. This is the class of man who will shout that "Life is worth living," and then go to some other city to buy his supplies because he can get them a few dollars cheaper than he can in his home town.

History will deal with these men as it will deal with those who are broad-minded, courageous, and honest with themselves, as well as with the people they meet in business.

Small hypocricies, self-deception in paving the way for deceiving others, are the bane of business and the means of precipitating financial crises like the present one.—The Capital, Detroit.

WOULD OBVIATE ACCIDENTS.

Means for lessening the possibility of accidents in factories are suggested in a special report recently issued by the Factory Inspectors of Ontario. No one will question the importance of keeping this subject everlastingly before workmen and employers alike. A sentence from a booklet issued by the American Institute of Social Service sums the matter up in a nut-shell: "We commend the common sense of those who build a fence at the top of a precipice even more than we admire the philanthropy of those who keep an ambulance at the bottom." It is the old dictum, "an ounce of prevention is worth a pound of cure." The present report consists almost exclusively of illustrations and descriptions of various machine guards. Following out the line of work which is here suggested, the factory inspectors can make themselves of real value to the public whom they serve. An inspection which will include suggestions to the employer for the better safe-guarding of his employees will be welcomed.

JAPAN'S IMPLEMENT INDUSTRY.

The tools and implements of the laborer, the mechanic, the farmer, and all the rest, are made within the country and used within the country by people to whom the making and the using alike have come down the line of ages from father to son. No doubt there has come down with primitive design a roughness of make and finish, that, if improved upon, would give a better impression, according to our idea. But here one discovers an apparent utilitarian trait or ruling principle; that is, the tools or implements may be best made to harmonize with the work for which they are intended. In other words, in Japan roughness of work and roughness of tools seem to have a proper relation to each other. One would judge that it was held as an economic and artistic principle, that polished steel and nickel-plated decoration were not of good taste in connection with the implements and tools of ordinary labor.

This view is sustained by reference to what is perhaps the finest class of edged steel workmanship. The secretary of the Yokohama Foreign Board of Trade, an old timer in the Far East, informed me that a British army surgeon, out here at the time of the Japan-China war, was struck with the excellence of the surgical instruments supplied to the Japanese staff doctors. He took with him upon his return home a complete case of these Japanese-made instruments, and reported afterwards that they were recognized as being essentially superior, especially the blade instruments, to those made and in use in England. And this is not an isolated assertion of the superior quality of the Japanese surgical instruments.

What has been said of axes, of the plane and the saw, may apply to the miscellaneous others, that go to make up a carpenter and joiner kit or chest of tools. There may be seen on view in some hardware stores a specimen or two, not much more than a sample, of the foreign style of edge tools and other appliances. Possibly some Japanese workmen may have crossed the Pacific and acquired some practice with the foreign hammer, screw-driver, brace and bits, and so on, and may sometimes fancy that sort of thing if only to gratify the curiosity of his untravelled associates. But that does not make Japan a market for edged tools of the foreign pattern.—*Trade and Commerce Report.*

PERIODICAL SMOKE SUIT.

Mrs. Emma B. Jenkins, wife of Dr. Mozart Jenkins, of Trenton, N.J., who has become famous in the Mercer County and State courts for her numerous suits against the Pennsylvania Railroad Company for damages for an alleged smoke nuisance since 1898, has commenced another action against the company.

Mrs. Jenkins' home is a block from the main line of the Pennsylvania, and she brought the first suit for damages in the United States Circuit Court in 1898, claiming damage to her furniture and other household articles from the black smoke from the locomotives. She was thrown out of court because she did not prove damages to the extent of $2,000, the limit of that court. She then went to the Supreme Court, where her suit on trial was dismissed. Mrs. Jenkins appealed to the Court of Errors and Appeals; the verdict was reversed and she was given $100 as a result of a new trial.

In August, 1902, Mrs. Jenkins brought another suit for accrued damages from the date of her former verdict, but the Mercer jury rendered a verdict of no cause for action. She appealed again, and this time got a verdict of six cents. The suit just brought is for accrued damages from the date of the last-mentioned verdict. Mrs. Jenkins claims the smoke is a continual nuisance, and holds that either the State or the city should move to prevent it. She brings these suits periodically to vindicate her stand in the matter.

LEGAL DECISION UPON C.I.F. QUOTATIONS.

Our Commercial Agent in Australia writes as follows in the Trade and Commerce Reports about an interesting question:

"In my report of August 7th of last year, I called attention to the report of a case decided in a court of New South Wales respecting a shipment of onions from Japan. The purchase had been made c.i.f. The onions, though loaded in good condition, arrived in Sydney in a bad condition. The purchaser refused to accept them, except on the shippers' account. An action was entered by the shippers to recover the price of the onions, and a counteraction by the Sydney receivers for damages for failure to deliver the quantity of onions in good condition. The trial judge decided that in shipping goods from Japan at a price c.i.f., Sydney, the risk of the transit fell on the vendor, and that he was bound to deliver the goods in merchantable condition at the port of destination. The case was appealed to the High Court of Australia, which is the highest court of appeal in Australia. The chief justice reversed the judgment of the court below, in which he was supported by his two colleagues sitting with him.

"It was held that the contract was for the shipment in Japan of that season's onions. They were to be sent at certain times in specified vessels, which was done. The duty of the shippers was to ship in Japan and not to deliver in Sydney, and that the action of the Sydney buyers was wrongly brought unless it was a term of the contract that the goods should be at the risk of the vendors during the voyage. This provision was not in the contract. The vendors were, therefore, entitled to a new trial, while a nonsuit was entered in the case of the action of the buyers against the vendors. The decision of the High Court of Australia restores the definition of c.i.f. to the understanding in which it is usually regarded. Shipments under contract of c.i.f. mean shipments in good order at the railway station or port of export; the risk of carriage remaining with the buyers. This decision is of importance to Canadian exporters."

Spend the Money at Home*

The Pulp-Wood Problem

THOUGHTFUL men are beginning to realize that, apart from the mines and the harvests of the sea, the foundation of our material wealth is the soil and the foundation of soil tillage is the forest. The marvellous achievements due to the control of electricity and the relation of water-power to electrical energy bring home to those who study cause and effect the truth that the greatest asset in the material power of a nation in the twentieth century is the forest. Moreover, a survey of history shows that the decline and impoverishment of some of the greatest nations of ancient and modern times can be traced to the destruction of their forests—Mesopotamia among ancient nations and Spain among modern being striking examples.

It has been demonstrated that the planting of forests in a treeless country has increased and regulated the rainfall, and it has been proved with equal certainty that the stripping of the trees from a forested region has made the water supply irregular, and made fertile lands arid.

Lessons from the Past.

The effect of forest destruction in decreasing the regular flow of rivers has been shown with lamentable consequences in parts of Canada and the United States. For instance, the clearing of the forests from the Alleghany Mountains has reduced those regions to comparative sterility, and has been the direct cause of such fearful calamities as the Johnstown flood, which swept away almost a whole city during the spring freshet which broke up a reservoir. From a like cause, the spring floods which cause frequent disasters and destruction of property in the valleys of the Grand River and Thames River in Ontario, and of the St. Francis and Magog rivers in Quebec, are due to the destruction of the forests on the hills from which the tributaries of those rivers spring. In those districts, there are men still living who remember steams now completely dry in the summer, which once ran all the year round and furnished power enough to drive mills. The simple reason for such a change is that where forests surround the sources of a river, the snow and rain pass more gradually into the earth and into the tributary brooks, so that the flow of the river is more steadily maintained throughout the year; but if the trees are stripped from these hills, the snows and rains are carried away down the streams in torrents in the spring, leaving the streams low or completely dry in the summer. These sweeping freshets not only cause the destruction of bridges and loss of property, but they wash off the richer surface soil, and where this soil is thin, the land is sometimes reduced to such barrenness that it is incapable of either raising grain or again growing trees. Such desolating changes have been brought about in more than one place in the provinces of Quebec, New Brunswick and Ontario within the past hundred years.

An Essential for Power.

When we appreciate the growing importance of water-power as a generator of electricity, and when we remember that vast regions of Canada—for example, Ontario, Quebec, New Brunswick, and Prince Edward Island—are devoid of any large deposits of coal, we see the vital importance of maintaining the water-powers of our rivers and streams at their greatest efficiency, if our manufacturers are to thrive in competition with countries having cheap coal. We may thus see what a crime it would be to our posterity if by one supreme act of folly we reduced whole regions of our fertile country to barrenness, and, at the same time, crippled the water-powers on which our future industries must depend.

As past generations of Canadians and Americans have had to clear away the woods to found settlements, and as forests have abounded over an enormous area of North America, many of us have by education imbibed the false notion that trees are an enemy to be got rid of rather than an asset vital to our national prosperity.

In the United States where forest destruction has been carried on to a more disastrous extent than in Canada, people are waking up to the fact that the forest is a national necessity, and, in about forty States of the Union, State legislation has been passed or is being prepared to preserve existing forests and restore those already wasted, especially those at the head waters of the more important streams and rivers.

The Demands of the Press.

Among the destructive agents in the wasting of the world's forests in recent years, the printing press stands pre-eminent. The experiments of Keller, in Germany, in 1844, by which pulp was produced by grinding wood, and the further experiments of Watt and Burgess in England in 1854, when pulp was made by a chemical process, resulted in greatly cheapening the cost of paper, especially those classes used for newspapers. The method of converting wood into pulp by mechanical grinding was introduced into the United States about 1870, and in ten years this process brought down the price of news print from 9 to 4c. per lb. Since then the improvement of processes and the extension of the industry have further reduced the price till recently it sold at 2 cents a pound. This cheapening has made possible the enormous increase in the size and circulation of the modern daily newspaper—one of the marvels of the age, and as fearful in its possibilities of evil as grand in its possibilities of good to the world. To satisfy this hungry demand of the daily press, the forests of spruce, fir, balsam and poplar in the United States have been slain by counties and states, until now those who have studied the situation begin to realize that America's supply of cheap pulp is at an end, because the remaining areas of pulp timber are either inaccessible or insufficient. Year by year, the United States pulp manufacturers have to go further away for their supplies of timber within their own territory, and year by year, they have had to draw to an ever increasing extent upon the forests of Canada for pulpwood. During the year ending June, 1907, the United States imported pulpwood from Canada to the amount of 650,366 cords, or enough to manufacture say 520,000 tons of news paper, while its imports of ground pulp from Canada were 149,827 tons, valued at $3,230,272. Besides this it imported pulp from other countries, chiefly Norway, to the amount of 63,283 tons valued at $3,118,585, largely chemical pulp. These are official figures of the United States, but while the Canadian official returns show an export to the United States of 452,846 cords in the nine months ending March, 1907, or at the rate of over 603,794 cords for the year, it is the opinion of the "Pulp and Paper Magazine of Canada" that the actual quantity of pulpwood shipped to the United States amounts to from 800,000 to 1,000,000 cords per year. Reasons for this estimate are given in a paper to be found in the Canadian Forestry Association's Report for 1906. According to a special report of

* Published by Biggar-Wilson, Ltd.

the United States Census Bureau the consumption of domestic spruce wood used by United States pulp mills increased 47 per cent. in quantity, and 122 per cent. in price in the five years from 1900 to 1905, while the consumption of Canadian spruce wood by United States mills increased 102 per cent. in quantity, and 150 per cent. in price in the same period. The general cost of wood used for mechanical and chemical pulp was more than doubled in the five years named, for every variety of pulpwood except domestic poplar. Canadian poplar had increased 176 per cent. If these percentages could be aplied to the conditions in 1907 the increase would be still greater.

The Increasing Demand.

As the increase in the number and circulation of newspapers proceeds throughout the world, the difficulty of supplies must increase, unless some substitute, not yet practicable, is discovered for pulp from wood, so that what is now a national problem to the United States and other large paper manufacturing countries, will be a world's problem a few years hence. It is not alone the ever growing demand of the newspaper press, but the manifold uses of wood in other arts which is laying waste the forests of North America, and bringing this crisis near. Industrial statistics recently compiled show that while steel, concrete and other materials are increasing so rapidly for structural purposes, the consumption of wood is greater per head of population in civilized countries than ever before.

The vast expansion of manufacturing in America has brought about this exhaustion of its surplus timber so swiftly that it is only now beginning to be comprehended. It is but a few years, for example, since official documents spoke of the timber supplies of the State of Michigan as inexhaustible; but to-day large numbers of the wood-working establishments of that State have to import their raw materials from other parts of the continent, and the saw mills have had to depend for their operations on logs imported from Ontario, until the recent law of that province compelled the cutting of the logs on the Canadian side, to the great advantage of the Ontario lumber industry. The pulp mills of northern New York having eaten into the heart of the Adirondack Mountains have now to turn to Canada for a greater proportion of their supplies, while the pulp mills of Wisconsin, supposed also to have an inexhaustible supply of raw material in their own State, have, during 1907, been compelled to haul pulpwood by rail to the extent of about 70,000 cords all the way from the Province of Quebec to eke out their supplies. The last-named development is to some extent due to the conditions of water supply and difficulty of getting timber from the woods, but the irregular water supply is itself due to the exhaustion of the great forest areas, and all the facts tend to show the sure approach of the great crisis referred to, and to explain why some twenty-seven States of the American Union have already introduced, while a dozen other States are preparing to introduce legislation to check this devastation and recover, if possible, the waste already wrought.

By no Means Inexhaustible.

Apart from the Adirondacks and the Wisconsin and adjoining regions, the forests of Maine have been cited as furnishing inexhaustible supplies of timber, and as being able to supply the pulp mills of the United States for all time. No doubt these estimates have been believed by those who made them, as was the case with those who believed the forests of Michigan were sufficient for that State's needs, but it is a noteworthy fact that during the present year the International Paper Co., of New York, has obtained wharfing facilities at Portland, Me., to which port it is bringing vessels with cargoes of pulpwood from the coasts of Quebec and New Brunswick for its own mills in New England, some of them in the State of Maine itself, while other American companies have obtained large timber limits in New Brunswick, Nova Scotia, and Northern and Eastern Quebec, with the same object of keeping up the supplies of wood no longer obtainable at home, except at greater expense. Counting the negotiations under way at the present moment for the acquisition of timber tracts in Eastern Canada, United States paper and pulp companies have purchased from 12,000 to 15,000 square miles of Canadian spruce limits. The Union Bag and Paper Co., which owns over 2,000 square miles of spruce limits in Quebec, recently explained to its shareholders, as the reason of reducing its dividend from 7 to 4 per cent., that it was necessary to acquire large bodies of timber in Canada " on account of the rapid increase in the market price of pulpwood, and the rapid disappearance of the spruce forests of this continent." This is, of course, the only reason the other large companies have for buying timber lands in Canada.

Canada has the largest forest area of any country in the world, and has also a far greater aggregate of water-power than any other country. Considering the relation of forests to water-powers, and the relation of water-power to electrical energy in a country largely deficient in coal—at least in its central provinces—and considering further the relation of forests to those industrial arts in which Canada excels, the conservation of those forests becomes the gravest problem in the whole range of our material life.

The area of the forests of Canada is estimated by Dr. Robt. Bell, of the Geological Survey of Canada, at 2,600,000 square miles, or about 1,657,600,000 acres, of which over half may be in pulpwood. This may appear to afford us timber limits illimitable, but huge areas of these timber lands are inaccessible and will remain so until vast sums of money are expended for transportation facilities, while in our more northerly regions, the annual growth and, consequently, the rate of reproduction, is slower than in areas to the south. Hence, we will find in Canada, as those engaged in the timber trade of the United States have already discovered to their dismay, that the stores of wood commercially available, are by no means inexhaustible. We still have this great advantage, that we can profit by the follies and mistakes of our neighbors, and apply the ounce of prevention rather than wait till we need the pound of cure.

The Zeal for Exploitation.

The zeal and energy of Americans in developing great enterprises, and the devotion of many of them to money, have led them into excesses which have brought suffering to the people, and will, if pursued, cause still more suffering and privation to future generations. The reckless exhaustion of the soil of the western prairies which is largely the cause of the migration of American farmers to the Canadian North-West; the wanton depletion of the white fish and herring on the American side of Lake Erie by American fishermen, who after the destruction of their own fishing grounds invaded the Canadian side regardless of Canadian laws or of danger to good relations between two countries; the clamor of the American fur sealing interests for a monopoly of the seal killing in Behring Sea, and the swift decimation of the seals in consequence of securing that monopoly; the fishing by the most destructive methods which has marked the operations of American fishermen on the Atlantic coasts, where many kinds of fish are almost extinct, and where encroachments on the territorial waters of Canada and Newfoundland have caused constant friction between neighboring peoples—these are examples of that zeal or greed for gain which is concerned with its own day and hour, and takes no thought of the claims of posterity.

But the evils that are being brought on the country by all these classes, are of little consequence compared with the destruction of American forests—an evil which in its effects on future generations, may truly be described as the abomination that maketh desolation.

Our Own Danger.

The same tendencies that will wreak havoc upon the United States if allowed to grow, are operating in Canada, but it is the duty of those who can shape our public policy to see that special interests are not permitted for their selfish ends to ruin that greatest of all our natural resources which it has taken a bountiful Providence hundreds of years to create, and whose beneficent influence was intended for the whole people and not for a class.

Canada now stands in two dangers—one the uncontrolled desolation by the hands of its own people of the forests which regulate and maintain the water-powers of our rivers and influence the rainfall upon which successful agriculture must depend in the future—the other, the depletion of those forest areas timbered with spruce, balsam, poplar and other woods, which are being taken out of the country to supply American pulp and paper mills, whose home supplies are being exhausted.

What it Means.

It is bad that the forests are thus unwisely treated at our own hands; it is worse when we invite outsiders in to assist in destroying the heritage of our children. Even if this matter concerned only the present generation, and the question were only one of an industrial policy for the passing years, it would be unwise, as the following considerations will show. The value of a cord of spruce pulpwood shipped from the Eastern Townships to the United States four years ago was about $3.50 per cord; while a cord shipped in 1907 is worth $6 to $7 in the rough, or $8 to $10 when peeled. To the latter value—the highest valuation in the history of the province and being in itself a confirmation of the preceding statement as to developments in the United States—add the average railway freight ($3 a cord), and the money left in the province from the export of the cord of wood is, say, $10. Now if the same cord of wood is made into ground pulp in Canada, the result would be $20 per cord, and if it were manufactured into news print the value would be $45 per cord, or if into paper of the higher qualities the value would be from $50 to $100 per cord. Applying these results to the pulpwood exported from Canada, and taking the returns of the nine months of the official year as correct, the wood now exported to the Unted States would, if made into paper in Canada at an average of $50 per ton, yield a product worth over $30,000,000 a year.

This takes no account of the results to the railways and the communities affected by the creation of such an industry. The railway freigh. tariff on pulpwood is the lowest in the whole scale of freight rates in Canada and the United States. On pulp the freight is double that on pulpwood, and on paper about ten times. Then the creation of a paper industry means a great deal of new trade in machinery, supplies and general merchandise; the latter feature adding traffic and industry to the amount of from ten times to one hundred times the value of the traffic and merchandise directly concerned in the paper trade itself. The creation of a large paper industry would cheapen the cost of Canadian, as compared with foreign papers, and would bring into being other industries in paper products not now in existence, such as special kinds of stationery, paper boxes, and utensils made from paper and wood pulp, which are constantly being put on the market in countries whose paper industries are more highly developed than Canada's.

Thus, if Canada's pulpwood were all manufactured at home, industries would arise whose annual value would be millions of dollars, and yet all this could be accomplished while still so regulating the cutting of trees as to maintain the present rate of reproduction, and so conserving the value of our forests forever. Countries like Germany, France, Austria, etc., by scientifically treating their forests, have been able to restore depleted timber tracts and maintain present forest reserves, deriving from them a perpetual revenue which is a source of benefit to the whole nation.

A Case in Point.

The economic effect of prohibiting the export of pulpwood may be predicted upon the history of the lumber manufacturing relations of Michigan and Ontario. When the lumber manufacturers of Michigan found the timber supplies of their own State becoming depleted they bought timber limits in Ontario and rafted the logs across Georgian Bay and Lake Huron to Michigan, where they were made into lumber. This kept the lumber industry of that State active while the same business languished in Ontario, until the Ontario Government prohibited the export of logs. The Michigan mill owners had claimed that they were not dependent on Ontario logs to keep their mills running, but as soon as the Act was put into actual effect they at once began to move their mills to their Ontario limits, and the lumber industry of that part of Ontario has been in a thriving condition ever since, while the establishment of these new mills has also caused a development of general trade outside of the lumber business itself.

A Policy of Conservation.

The steps best designed to secure to our country the great national inheritance of its forests are:—first, the prohibition of the export of pulpwood and other woods that now go out of the country in an unmanufactured state; and, second, the creation of forest reserves on lands which form the chief watersheds of the rivers—especially rivers containing water-powers—and the gradual re-establishment of forests on those lands which investigation would show are better suited for timber growing than for agriculture. Large areas of such lands now exist in the country where, owing to the steadily increasing value of timber in recent years, tree growing will pay better than grain growing.

The pulp and paper industry has been cited as an example, showing the advantage, from an industrial point of view, of prohibiting the export of pulpwood. But the creation of a great Canadian pulp and paper industry is only an incidental advantage in such a policy—the greater purpose is national self-preservation. When our forests are despoiled, our water-powers are crippled, our agricultural regions put in danger by alternate drought and deluge, our great dairy and stock-raising industries must decline for the same reason, and the curse of barrenness must bring its sure blight upon the land as it has done in Spain and Mesopotamia, and as it is now doing in great tracts of United States territory.

No matter what the momentary advantage may be to the relatively few whose interests are in favor of exporting wood, we have no right to bring ruin to our children and desolation to our land, for that is what the indiscriminate destruction of the forest means. No one who frankly studies the history of the forests of other lands can fail to realize that, from the material point of view, the forestry question is the question of life and death to this future Dominion. What Canadian worthy of the name would bequeath a wilderness to his children in order that he might live out his own little day with a few extra dollars?

Modern Factory Construction

The Use of Re-inforced Concrete for Strength and Fire Protection

IN pace with the prosperity now for some years enjoyed throughout the Dominion, there has been a steadily increasing demand for a better class of structures for factory and warehouse purposes. "The Fireproof building" has come to its own. Two important factors have been responsible; the ever-ascendant cost of lumber, and the desire to keep insurance rates within reasonable bounds.

Manufacturers, also, do not lose sight of the fact—let their insurance outlay be what it may—that fireproof construction confers the boon of absolute freedom from apprehension lest after the insurance adjustment incidental to stock damage or loss. The extra cost of a fireproof concrete building over that one of mill construction is only 5 per cent. to 15 per cent.

The framework of such a building is preferably of steel columns, steel girders and joists. Steel columns, connected with steel beams at each floor level, may also be used to carry the outer thin panel wall. Otherwise, solid brick walls are utilized. The columns are enclosed by concrete and a three or four inch floor slab is laid between the steel joists, these with the girders also being completely encased with con-



Re-inforced Concrete in Flooring

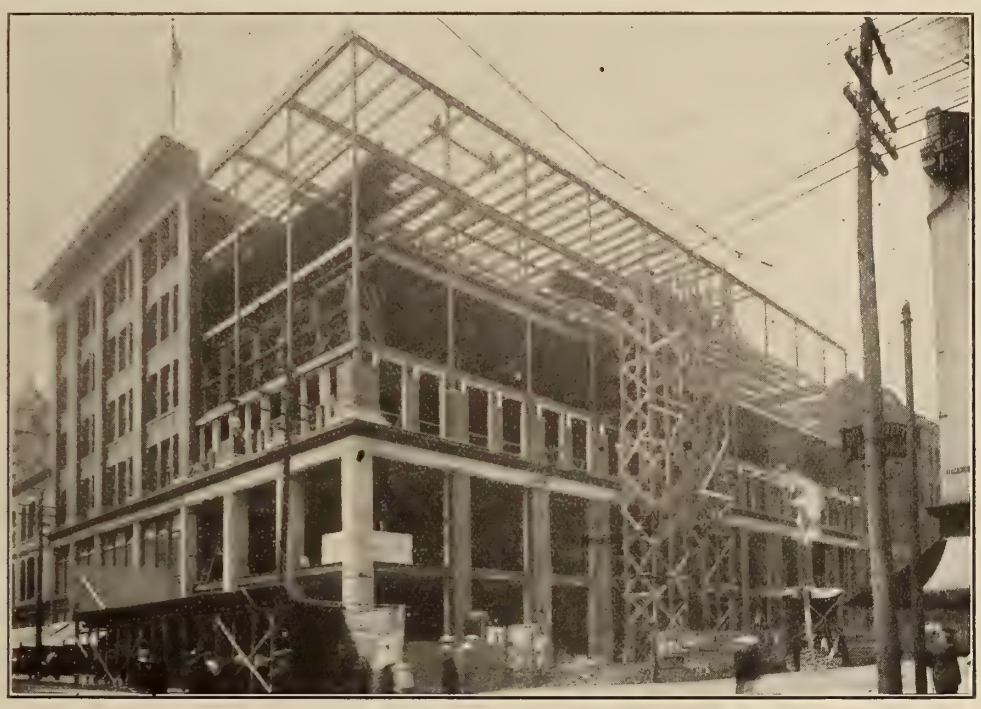
crete as the floor construction progresses. The floor slab is reinforced with expanded metal, so that—although light—it possesses great strength. By increasing the weight of the steel reinforcement according to well recognized engineering rules, it is possible to build floor slabs strong enough for any weights required. The all-concrete type differs from the above in that the columns and all beams are built of concrete, moulded in wood forms, and reinforced with high quality of steel rods and carried up storey by storey, simultaneously with the floors.

Reference to fire-proof construction would not be complete without mention of Portland cement walls, such as adopted by the E. B. Eddy Company, Ottawa, the Dominion Coal Com-

a conflagration should happen and cause a stoppage of business, more or less complete. Taking the case of mill construction, the last Toronto fire showed how quickly a conflagration, under certain conditions, can gallop through a building, however well sprinkled, and land floor after floor of the heavy beamed wood construction in the basement. Instead of causing this enforced cessation of business, a modern reinforced concrete warehouse, with its elevator and stair enclosures of expanded metal lath and Portland cement mortar, would be standing intact next morning. Upon whatever floor the fire entered or started, it would be confined there by these effectual firestops, and the floors being of reinforced concrete, this same storey would be ready for reoccupation

pany, Glace Bay, and the Dominion Iron & Steel Company, Sydney, B.C., etc. The method is simple. Light steel studding is erected, securely fastened with metal clips to the structural members, and to this is wired expanded metal lath, which receives two coat work of cement-gauged mortar each side, thus entirely covering and effectually protecting from rust the strong steel core. The usual thickness for this wall is two inches, and when completed it virtually forms a solid stone panel, with the internal steel reinforcement described to give it so much additional strength. Its lightness, 18 lbs. per square foot, obviates the cost of expensive footings, etc. This style of panel work being absolutely fireproof has also been adopted in many instances for sloping roofs, application of a water-proofing paint being the finishing operation. For flat roofs nothing better can be devised than a light panel built in same manner as above described for concrete floors, reinforced with expanded metal.

Where circumstances lead to the retention of structures built of combustible materials, while impossible to get perfect safeguards, it is feasible at reasonable expense to greatly reduce the risk. The wrapping of wood beams and columns with expanded metal lath, this to receive a good thick coat of Portland Cement mortar, gives excellent results. A double covering, contriving a 2-inch air space between the outer and inner wrapping of lath and plaster, is often resorted to. Many industrial buildings of frame floor construction are being equipped with enclosures identical with the outer wall construction already described. This precludes the possibility of any fire starting in a lower flat taking advantage of the opening as a flue to spread to the flats above. Any window openings in same should be equipped with wire glass, and all frames should be of metal work as prescribed by the Underwriters. There are many instances of the adoption of this variety of partition as a firestop in long, low manufacturing buildings, while it is also favored on account of its lightness as a method of fireproofing steel trusses in one storey shops.



Modern Construction of T. Eaton Co.'s New Building

The Jeffrey Mfg. Co. of Montreal have issued a special catalogue illustrating the complete lines of screens manufactured by them.

A NEW ANNEALING PROCESS.

According to the Sheffield Telegraph, an engineer of Sheffield has invented a new annealing process. The principle of the new annealing furnace is that the re-heating of the steel is performed in a chemically reducing instead of in a chemically oxidizing atmosphere. This is the effect of burning air in gas instead of having, as in the ordinary annealing furnace, gas burning in air. A small producer-gas plant is an integral part, of the installation. The producer-gas is led through recuperating chambers, and air already heated to a high temperature is forced under pressure into the gas. A great saving of fuel is effected in this way. A small coal, much cheaper that that at present employed in annealing, can be used, and owing to the close proximity of the producer-gas generator to the annealing furnaces, and to the fact that the furnaces are built down into the ground, with only their covers at the floor level, there is but little loss of heat through radiation.

The great advantage claimed for the new process is that the finest high-speed and crucible steels can be annealed without oxidizing or "scaling" the surface of the bars. By the older process the scaling of the thin bars amounts to as much as two per cent. of the material, which is a consideration with steel sold at as much as 1s. 3d. a pound. Moreover, the new process gives a uniform dead softness to the steel so that it may be cut with a penknife, and this is considered a valuable property in the case of steels that have to be made up into twist drills, milling cutters, reamers, etc., before being hardened again after the tools have been shaped.

No other annealing furnace for steel bars is gas-fired, and it is found that annealing can be done with four hundredweight of coal per ton of steel annealed, whereas the ordinary annealing furnace requires nearly a ton of coal per ton of steel annealed. The complete process is accomplished in forty-eight hours, whereas in all other annealing furnaces in steel works both in Great Britain and abroad the thermal treatment occupies four, five or six days, and results in more or less oxidation of the surface of the material.—*Trade and Commerce Reports.*

Defends Asiatic Immigration

Discussion at Dinner of Montreal Manufacturers

IT was the good fortune of the Montreal Branch of the Canadian Manufacturers' Association to have with them at their annual autumn banquet a speaker who was able to discuss the Japanese immigration question from first-hand information. That was not the only notable feature of the gathering. The occasion was seized by the members for showing their appreciation of the work of the Montreal Secretary, Mr. Dakers Cameron, in a tangible form. But that comes later.

Mr. S. W. Ewing presided, and around the tables were gathered an exceptionally large number of manufacturers. The dinner was served in the Canada Club, and was thoroughly enjoyed. After the menu had been taken care of, Mr. Ewing introduced the speakers. It is no reflection on the quality of the other speeches to say that the honors were carried off by Dr. Johnston, who, as a representative of the American Presbyterian Church, was in Vancouver during the time of the recent riots. He had a subject of absorbing interest, one of the very biggest in the world, upon the solution of which depends more than we can imagine.

Asiatic Labor.

Rev. Dr. Johnston took strong ground against the anti-Asiatic feeling in British Columbia, pointing out that the question of Asiatic immigration was far more than a merely local, or even an Imperial one, but pertained to the development of the whole world. The position taken by the British Columbians, he remarked, was somewhat one-sided. They wanted the privilege of sending all the Canadian exports they could to the countries of the Orient, but desired to forbid the eastern peoples to send back their great export—labor. And this despite the fact that the greatest need of Canada to-day was a plentiful supply of labor to exploit her undeveloped wealth. Further, he pointed out, the Eastern peoples could supply just the kind of labor Canada needed, the men who would do all sorts of coarse and heavy work which the white men of this country did not want to do.

In opening, Rev. Dr. Johnston took strong ground against any policy of exclusion that would shut out the Oriental and rob Canada both of present advancement and of the great place which she is destined to fill in the future as a world power.

The problem was peculiarly, he said, one relating to Canada's largest and, in some respects, richest province, British Columbia, but the people of British Columbia must learn, as we must all learn, to consider it in its relation not only to the Empire but to the world. There are questions in which even imperial thinking is too narrow; thought must widen until it includes the world.

The problem, he said, is of comparatively recent growth. On one side the Northern Pacific is a great land occupying half a continent, but recently discovered even to itself, sparsely settled, but a land that yields readily of its measureless wealth to hardy and persistent toil. On the other side is a great population, crowded, suffocated, starving, of not less than five hundred millions. The ocean separating these lands has been bridged, and it would look as though, while the products of one should flow into the hungry markets of the other, the labor from across the seas should come to us and help in the development of our as yet undeveloped resources. But now a cry is heard that while the markets of China and Japan must remain open for our trade, the Chinese and Japanese must not think of sharing the wealth of this new land. This did not seem fair.

An Impossible Policy.

For himself, Rev. Dr. Johnston questioned whether, aside entirely from all questions of expediency or justice, such a policy was possible. Scientifically, commercially, in some cases socially, the world to-day was a unit. We had entered upon the cosmopolitan era, and even the lines dividing nations were disappearing. The other day he had asked a gentleman prominent in Dominion politics if it appeared possible to him that at this stage of the world's history it was possible for any great nation to close its doors to the people of other great lands. The gentleman had confessed that to him it seemed hopeless. It is more than a question of navies and armies, it is a question of the spirit of the time. There are world-tendencies which a nation cannot oppose, and prosper. The trend of history cannot be stemmed, nor the wheels of the world's progress reversed.

A Call for Development.

A policy of exclusion, to the speaker, seemed as needless as it was impossible. The competition of Oriental labor was urged as a reason for the exclusion of the Oriental, but to-day what Canada needed more than any other single community was labor. We have undeveloped wealth in almost every form in which it is found in any part of the globe; we have capital within the Empire waiting for investment; what we have not, and what we must have if our land is not to lag in the race of national development, is labor—labor especially of that class that will submit to the hard conditions and endure the severe toils inevitable in the pioneer work of development in a land like ours.

The Oriental has been declared to be immoral and filthy. As to his filth, it is in no small measure due to the crowded condition of the quarters where he is herded, and for this the greed of landlords is not infrequently the cause. As to his immorality, it is true the Chinaman smokes opium, but medical men will tell you that in other parts of Vancouver and of Montreal the habits of drug using is not unknown. If two Chinamen found themselves together and unoccupied, they would find the means to gamble, but let half a dozen society ladies in Montreal be thrown together, and it is questionable if some one of them would not produce the necessary material for a game of bridge.

Two things are possible and are necessary. Let the Government demand of all who come, Asiatic or European, obedience to certain sanitary regulations. Overcrowding can be prevented, the number of occupants to a house or to a block of houses, can be limited; a Chinatown and a Little Italy can both be made an impossibility. Much would doubtless be done toward encouraging morality were Japanese and Chinese alike to be required to bring their wives and families. That, too, was a possible regulation which the Government could enforce.

Canada's Destiny.

To any student of history it was very evident that every nation that rightfully laid claim to greatness contributed something to the progress of the whole world. The conceptions of national life changed and advanced as the centre of world-power moved from Asia Minor to the Mediterranean, from the Mediterranean to the Eastern Atlantic, and from the Eastern Atlantic across the seas. The American Republic had taught in theory the equality of all men and had taken a long step in breaking

down the old barriers of caste and class. To the speaker it came at times as a vision that this Canada of ours was to be the land in which the unity of the race, the true brotherhood of men, was to be wrought out, not simply as a theory, but as a fact. To her he believed it was to be given to strike the last note in the orchestral harmony of the ages that should usher in the age when strife and division should cease.

Thus and thus only would Canada's true destiny be realized; thus would she attain to true greatness, in a service that should help to usher in the time for which the nations wait, when there shall be realized on earth the song the angels heard long ago, Peace on earth to men of good will.

The Speaker Thanked.

The Chairman, at the conclusion of Dr. Johnston's address, thanked him heartily on behalf of the Association. It was, he said, a great contribution to the discussion of the question which had been for weeks agitating the counrty.

At this stage of the proceedings a case was ceremoniously borne into the room, the bearers being preceded by a piper in full uniform, playing "The March of the Cameron Men." Mr. Dakers Cameron, the Secretary of the Branch, was then called forward, and Mr. Ewing read an address to him, expressive of the members' appreciation of his work and their pleasure at his approaching marriage. Hon. J. D. Rolland unlocked the casket and presented him with a handsome cabinet of silver. Mr. Cameron briefly thanked the members for their kindensses, not only then, but upon all occasions.

Addresses were given during the evening by Hon. A. Desjardins, A. B. Donly, Canadian Commercial Agent in Mexico, Prof. H. T. Barnes, of McGill University, and G. M. Murray, of Toronto.

RECOGNIZES THE NECESSITY.

President Roosevelt has seized upon the great question of the preservation of the natural resources of the United States. Having taken a trip down the Mississippi, and having held conferences with men who have given the matter much thought, he has summoned a meeting of the Governors of all the States, to try and arrange a common plan of action. In his letter to the Governors he expresses his feeling about the importance and urgency of the question. He writes:

"The natural resources of the territory of the United States were, at the time of the settlement, richer, more varied and more available than those of any other equal area on the surface of the earth. The development of these resources has given us, for more than a century, a rate of increase in population and wealth undreamed of by the men who founded our Government, and without parallel in history. It is obvious that the prosperity which we now enjoy rests directly upon these resources. It is equally obvious that the vigor and success which we desire and foresee for this nation in the future, must have this as the ultimate material basis.

"In view of these evident facts it seems to me time for the country to take account of its natural resources and to inquire how long they are likely to last. We are prosperous now; we should not forget that it will be just as important to our descendants to be prosperous in their time as it is to us to be prosperous in our time.

"Recently I expressed the opinion that there is no other question now before the nation of equal gravity with the question of the conservation of our natural resources; and I added that it is the plain duty of those of us who, for the moment, are responsible, to make inventory of the natural resources which have been handed down to us, to forecast as well as we may the needs of the future and so to handle the great sources of our prosperity as not to destroy in advance all hope of the prosperity of our descendants.

"It is evident that the abundant natural resources on which the welfare of this nation rests are becoming depleted and in not a few cases are already exhausted. This is true of all portions of the United States; it is especially true of the longer settled communities of the East. The gravity of the situation must, I believe, appeal with special force to the Governors of the States because of their close relations to the people and their responsibility for the welfare of their communities. I have, therefore, decided in accordance with the suggestion of the Inland Waterways Commission to ask the Governors of the States and territories to meet at the White House on May 13, 14 and 15 to confer with the President and with each other upon the conservation of natural resources.

"It gives me great pleasure to invite you to take part in this conference. I should be glad to have you select three citizens to accompany you and to attend the conference as your assistants or advisors. I shall also invite the Senators and Representatives of the 60th Congress to be present at the sessions so far as their duties will permit. The matters to be considered at this conference are not confined to any region or group of States, but are of vital concern to the nation as a whole, and to all the people. Those subjects include the use and conservatism of the mineral resources, the resources of the land and the resources of the waters, in every part of our territory.

"In order to open discussion I shall invite a few recognized authorities to present brief descriptions or actual facts and conditions without argument, leaving the conference to deal with each topic as it may elect. The members of the Inland Waterways Commission will be present in order to share with me the benefit of information and suggestion, and, if desired, to set forth their provisional plans and conclusions.

"Facts, which I cannot gainsay, force me to believe that the conservatism of our natural resources is the most weighty question now before the people of the United States. If this is so, the proposed conference, which is the first of its kind, will be among the most important gatherings in our history in its effect upon the welfare of all of our people."

THE SOURCE OF RADIUM.

Doubts have been cast on the generally accepted theory that radium is a decomposition product of uranium, says Nature. A recent investigator showed that, starting with a solution of uranium nitrite carefully purified by repeated crystallization, the amount of radium formed in eighteen months was less than 1-2,000 of the amount which the disintegration theory called for. In a recent experiment upon the growth of radium from actinium, this same scientist decomposed a kilogramme (2.2046 pounds) of carnotite ore, containing about 20 per cent. of uranium, in an excess of hydrochloric acid. This solution was then so treated as to separate the actinium from the other constituents. It was secured in the form of a chloride, which was then sealed in a glass tube. After two months the gases from the tubes were placed in an electroscope and the activity of the emanation determined. The tube was then resealed and allowed to remain for several months longer. The emanation at the end of this time was found to indicate an activity corresponding to three times the former amount or radium. From this rate of increase it is computed that the half period for the evolution of the emanation would be about 3,100 years. Since the amount of actinium in a mineral is apparently always proportional to the amounts of uranium and radium present, it is thought that actinium may prove to be the looked-for intermediate product.

OUR NEW ZEALAND LETTER.

WELLINGTON, November 8, 1907.

The new tariff has passed both Houses with very slight alterations. With the exception of those on footwear and a few other lines the duties imposed are considered satisfactory to the majority. The arrangement of the new tariff, of which I send you a copy by the same mail, is very practical, and shows at a glance which articles are affected by the preferential duty and to what extent and when operative.

On the 26th of September this Colony was raised to the rank of a Dominion, consequently we celebrated on that day the first Dominion Day. The Government did its best to make the observance of the day as general as possible, but there was in spite of this very little enthusiasm. The majority of the people are indifferent, and as there was some fear that the statutory holidays would be augmented by another one, there was some strong opposition on the part of the mercantile section of the country. The Premier, however, dispelled these fears by announcing that in future the day would be merged with some other holiday.

"I am glad to be able to report that the business of the Alley Line is increasing. Both the *Bucentaur* and the *Pondo* were full ships. Unfortunately the *Bucentaur* ran on a reef in Suva Harbor, with the result that she had to dock in Auckland. The repair of the damage done will cost pretty near $20,000. The *Pondo* has been ordered back to England, and the *Kazembe* will take up her running. The latter steamer left Wellington on the 3rd inst., and is now in Auckland to take some more cargo. The *Kazembe* is timed to leave for Vancouver on the 7th inst. She also is a full ship. She is on her maiden trip, and so far has given great satisfaction. She has room for about 8,000 tons, and is a fine type of the latest kind of cargo steamers and a decided improvement on the *Pondo*. I am informed that the *Bucentaur* also will be replaced by a new steamer of the same type as the *Kazembe*. This is a big improvement, and if in future the running of the steamers will be less erratic than in the past, business is bound to increase.

It is to be deplored that these new steamers are not fitted up with a refrigerator plant, as this is indispensable for the carrying of butter, fruit, meat, etc. There is a big exchange of these commodities during certain seasons between California and New Zealand, and the same business might be worked up between Canada and New Zealand, but it is impossible to do so without cold storage.

Business is very brisk here and in all other centres of the Dominion. 1907 will be a record year in every respect.

COSMOPOLITAN.

GAS-PRODUCER LOSSES.

The efficiency of a gas producer will always be less than unity. No producer ever has or ever will be made to operate without any loss. The problem confronting the gas-producer designer and user is not to attempt the elimination of all losses—which would be a physical impossibility—but rather to keep all the losses down to the lowest ponit commercially feasible. By "commercially feasible" is meant the co-ordination of all the commercial features of first cost, cost of fuel, cost of labor, etc. The question of commercial feasibility is frequently neglected and this has resulted in going to two extremes, either the producer is very inefficient or else a high-priced and complicated outfit is used where a simpler and lower-priced one would be better adapted. High efficiency always necessitates more expensive apparatus than is required for operating at a low efficiency. However, as a low efficiency always means a large waste of fuel, it will frequently pay to install the more expensive producer. No general rules can be given for all cases. Each plant has its own special problems to be considered.

The heat losses in a gas producer may be divided into two general classes, and these may in turn be further subdivided as follows:

Heat Losses.

A. Process losses.
   1. Lost in evolution of carbon monoxide.
   2. Lost in decomposing steam.

B. Apparatus losses.
   1. Radiation.
   2. Evaporating moisture in coal.
   3. Heating undecomposed steam.
   4. Sensible heat in gas.
   5. Tar and soot.
   6. Coal in ashes.
   7. Sensible heat in ashes.
   8. Volatilization of hydrocarbons.
   9. Formation of carbon dioxide.

The process losses are due to the heat absorbed by the gasification process. The apparatus losses are in a large measure due to imperfections in the apparatus.

Every pound of carbon converted into carbon monoxide will evolve 4450 B.t.u. This reaction supplies the heat required to keep the process of gasification going continuously. This is absolutely fixed and cannot be altered.

Every pound of steam that is decomposed will absorb 3913 B.t.u. These heat units must come from the heat evolved in the formation of the carbon monoxide. In order to take care of all the apparatus losses it is of course obvious that only a fraction of a pound of steam can be used per pound of carbon converted into carbon monoxide if the gasification process is to be continuous.

The radiation loss is simply the heat that is radiated from the fuel bed. Proper jacketing of gas producers with non-conductors like mineral wool will reduce this loss materially. The relative values of a few substances used for heat insulating purposes is shown in the following, where the numerical values represent the B.t.u. radiated per square foot per minute. The respective materials are taken 1 in. thick:

Efficiency of Heat Insulators.

Hair felt	1.72
Mineral wool	2.17
Charcoal	2.32
Paper	2.33
Ashes (loose)	3.50
Asbestos	3.62
Air	8.00
Sand	10.35

Hair felt being combustible is not desirable for heat insulation around a gas producer. The radiation loss on many producers is excessively high on account of the entire absence of, or poor quality of the heat insulation. The above table shows the absurdity of using sand for retaining heat in a producer.—*S. S. Wyer, in Brick.*

The Young-Thomas soap factory, the latest acquisition to Regina's manufacturing industries, was formally opened last month, when the management on a general invitation held a reception at their factory building and showed their guests through the works, giving each visitor a sample of their product.

Train Their Own Workmen

IT is now about eighteen months since the problem of securing efficient labor became pressing with the New York Central management. They came to the conclusion that the solution lay in the training of workmen while they were at the receptive stage, to take them in as boys and utilize the apprenticeship system for giving them the necessary instruction to make them skilled mechanics. Mr. J. F. Deems, the General Superintendent of Motive Power, states that the new system was not adopted for unselfish motives, although it will better the condition of the men materially, and the boys are being paid while under instruction. The management after most careful consideration, decided that the better returns from an educated body of mechanics, would justify the initial expenditure on the classes.

Prior to the organization of the new system, apprenticeship schools had been carried on at only four of the twelve shops maintained by the New York Central Lines. Under the new system schools have been established at nine points, the aggregate number of apprentices enrolled in July being about 450, or 67 per cent., of all the apprentices employed on all the lines. When schools shall have been established, as proposed at 11 other large shops, as large a proportion as 92 per cent. of all the apprentices will have been provided for, leaving only 8 per cent. at thirteen points who will need to be reached by travelling instructors. It is quite possible that within a year a school may be opened at the new shops now being completed at Springfield, Mass. As yet there are none of these schools in this State.

The Organization.

The "apprenticeship department" appears to have been very efficiently organized. It has been placed under the immediate direction of a superintendent of apprentices, who reports directly to the general superintendent of motive power and devotes his entire time to the work. The superintendent is assisted by a graduate of a technical school who has charge of the educational features. The central organization has charge of the general administrative work of the department, outlines the different courses, organizes new schools, and keeps in touch with all of the schools.

At each of the larger shops are two instructors—a drawing instructor, who in most cases is the shop draughtsman and who has charge of the school work, and a shop-instructor who gives his entire time to instructing apprentices in their shop work and to seeing that they receive the proper shop experience. Both of these men report directly to the local officers of the road. , The special features of the system, features which are common to all the schools are as follows:

Plan of Instruction.

The apprentices are instructed in drawing and in shop problems by a man already in the service of the company, on the shop property, during working hours and while under pay;

They are instructed in the trade in the shop by a special instructor, who gives the whole or part of his time to this work and who is responsible to the local shop management;

The instruction in the trade is given in the shop on the regular tools and in the regular run of shop work;

Apprentice schedules are followed, insuring a thorough training in the trade and giving the necessary variety and work.

The drawing and the problem courses are arranged to allow each apprentice to progress as rapidly as he desires, but so as to enable a single instructor to handle classes with as many as twenty-four students in a class.

The character of the courses is such as to fit the standards of the road, and to suit any special conditions which may exist locally.

Novel Feature of Course.

The method of instruction differs radically from ordinary methods of teaching in that text-books are not an essential part of the plan, there is no subdivision into subjects, all principles are clothed in problem form, there is no arbitrary standard of the amount of ground to be covered, and, finally, no examinations are held, the progress and marks of the apprentices being based on the close personal touch maintained between the instructors and the apprentices.

Stated more briefly still, the system provides for (1) the close supervision and instruction of the apprentices in the shop by a qualified instructor; (2) an adequate shop training, including practical instruction in mechanical drawing, for all apprentices, each of whom receives pay while in attendance; and (3) additional outside training involved in following a course of problems carefully prepared in order to suit the needs of the apprentices. Under this system the apprentices receive valuable technical training while actually in contact with real shop conditions.

The System Satisfactory.

While the system has not yet been in operation for a sufficiently long period to justify the making of an accurate statement as to results, yet it may be said that its adoption has met with the unqualified approval of all concerned and has received an enthusiastic response from the apprentices themselves. The men in the shops, both foremen and workmen, have evinced considerable interest in the apprentice schools and have manifested a desire for evening schools at which they may receive similar instruction. Several such evening schools have already been opened and others are to be established wherever the demand may justify such establishment. In these evening schools a nominal fee for instruction is charged.

The superintendent says, with reference to the attitude of organized labor toward the new apprenticeship system, that when the proposed system was first discussed "some of the leaders of organized labor looked upon the movement with a little suspicion, but as the work progressed, and they came to know what we were doing, the leaders, so far as I know, have most heartily approved of the scheme. In fact, some of them are quite as enthusiastic over the work as we are, and there is a less tendency to restrict the number of apprentices we may employ in proportion to the number of journeymen, as they see the great benefits that will accrue to the apprentices. And, as we aim to select the boys from the families of those already in our employ, they are not inclined to look with favor on the restrictions ordinarily imposed, as they see in this system too great an opportunity for their sons."

Among the Industries

The Canadian Bronze Powder Works have completed a fine factory in Valleyfield, Que.

The Standard Shirt Co., of Montreal, is erecting a new factory, to cost in the neighborhood of $100,000.

The Cement Brick Co., which was organized some time ago to operate at Sydney, will open a branch plant at Glace Bay.

The Crown Lithographing Co. have been incorporated with a capital of $100,000. They will carry on business in Ottawa.

The Wilcox Manufacturing Co., of London, Ont., have gone into liquidation. The firm have been in business for about two years and employed fifty hands.

The Auto-Strop Safety Razor Co., Ltd., have been incorporated in Canada, with a capital of $20,000, and head office at Montreal. Their business is indicated by the name of the company.

The Canada Tool Co. have been incorporated with head office in Montreal, to manufacture tools, electrical supplies, machinery articles and novelties. The capital stock is fixed at $20,000.

The Collier-Cunningham Company, Peterborough, have purchased machinery for the equipment of their new factory, where they will manufacture electric irons and all kinds of electrical heating apparatus.

The town of Barrie may get the Grand Trunk car shops for the Northern Division. The railway company ask a fixed assessment of $35,000 for all their property in the town. It is probable that the municipality will accept this proposition.

The Ham & Nott Manufacturing Company, of Brantford, will enlarge their factory, at a cost of $40,000, this summer. They had previously thought of establishing a branch at Ottawa, but have decided to increase their facilities at Brantford instead.

The St. John's Foundries, Ltd., have been incorporated with a capital stock of $30,000, to smelt, refine and prepare for the market metals of various kinds, and to do a general foundry and moulding business. The place of business is St. John's, Que.

The Doty Engine Works Co., of Goderich, are asking that town for a $35,000 loan at 5 per cent. interest, and ten years exemption from taxes. The company want to extend their factory and install a plant for making boilers and steel frames for steamers.

The Canada Tin Plate and Sheet Steel Co., of Morrisburg, have formally opened their plant. A large number of citizens and others were present. Large pieces of sheet steel are now on exhibition throughout the town, labelled, "The first tin made in Canada."

Moncton, N.S., will offer special inducements to the Higgins Shoe Factory to locate in that city. For a specified bonus and other privileges, the company are to build a factory within the city limits, employ 1,000 hands, and pay in wages at least $300,000 per year.

The Fort William Car Company have been incorporated with a capital stock of $1,500,000, to manufacture and sell cars and carry on such subsidiary industries as are deemed advisable. Wilfrid Bovey, of Montreal, is the legal representative of the new company.

A report from Prince Albert, Sask., announces that a United States firm have made a definite proposition to that town for the establishment of a $100,000 factory there. The municipality is also negotiating with two companies with a view to the establishment of foundries.

The Red Cliff Lumber Company, of Duluth, have purchased large fir timber areas on Vancouver Island, and will establish a mill there at once. The mill to be erected will have a capacity of 250,000 feet a day, representing in connection with the logging roads an expenditure of half a million dollars and the employment of 500 men.

A company is being organized, of Canadian and United States capitalists, to manufacture railway cars. The company will be capitalized at three million dollars, of which half a million will be spent next year on the plant. The output at first will be twenty-five cars per day.

Valuable discoveries of bog iron are reported from the Port Arthur district. Mr. James Conmee, M.P., has had tests made and he states that the ore is rich in iron. Bog iron is found in Quebec and is used in the smelter at Three Rivers. It yields a high grade of iron. The district in which the deposits have just been discovered will be thoroughly explored.

The Canadian General Electric Co., and The Canada Foundry Co. have issued their set of catalogues, running from I. to VII., in a convenient binder, with an index for the complete volume. The binder is big enough to admit of a further extension, so that future sections of the catalogue may be inserted as they are published. Buyers will find the arrangement of great practical convenience. To those who are not receiving supply catalogues already the General Electric Co., and the Canada Foundry Co., will send them on application.

The Canada Chemical Mfg. Co. have again built a new addition to their Toronto warehouse, so that they now have a frontage of 200 feet on Mill Street, and the buildings run back to the C.P.R. tracks. The two sidings provide ample facilities for unloading tank cars and other carloads. This is the third addition which has been built to the warehouse since the company has located its distributing warehouse in Toronto; but the rapid growth of the sales for acids and chemicals in the district has necessitated this constant enlargement of storage space. For the last couple of years the Toronto sales office, with Mr. Nieghorn in charge, has been located in the McKinnon Building, but Mr. Nieghorn and his staff are now moving out to the new Mill Street warehouse, where the sales office for Toronto district will be located for the future.

Trade Enquiries

NOTE.—For further information regarding any inquiry mentioned under this heading or the names of inquiries, apply by numbers to the Secretary, at Toronto.

240 **Antiminy Ore.**—A **London** firm is desirous of being placed in touch with Canadian producers of antimony ore, with a view to purchasing supplies.

241 **Articles for 5 and 10c. Store.**—A party in **Regina, Saskatchewan,** who is just opening a 5 and 10c. bazaar, is open to purchase domestic utensils, novelties of all kinds, candies, and any other articles suitable for this trade. Wishes catalogues from Canadian manufacturers.

242 **Baskets.**—A **Hull** merchant is open to buy at a reasonable price 20,000 wood chip baskets, suitable for holding 4 kilo net of black currants, and desires to hear from Canadian firms who can meet his requirements.

243 **Butter, Eggs, Preserved and Dried Fruits, Canned Fish and Meat, Fresh Fruit.**—Well-known firm of **Liverpool** produce importers, with good connections, is in the market to purchase large quantities of the above products from Canadian exporters. Will pay cash against documents, and purchase outright or sell on commission. Good references. Quote on delivery to Liverpool.

244 **Broom Handles.**—**Dublin, Ireland,** merchant is in the market to purchase broom handles, 50 x 1 1/8, in 50 to 1,000 gross lots. Quotations to be based on delivery to Liverpool. First class references.

245 **Broom Handles.**—A **Manchester** firm asks for prices and description of broom handles from Canadian manufacturers.

246 **Canned Fruits and Vegetables.**—A **Manchester** produce firm wishes to correspond with Canadian exporters of canned fruits and vegetables.

247 **Chair Seats.**—A **Manchester** firm asks for prices of three-ply chair seats from Canadian manufacturers.

248 **Commission Merchants.**—A firm of commission merchants at **Delhi** is desirous of offering its services to Canadian houses interested in trade with India.

249 **Doors, Windows, etc.**—A **north of England** firm desires to hear from Canadian makers of doors, windows, ballustrading and similar wood goods for the building trade.

250 **Essential Oils.**—A **Manchester** firm asks for prices of essential oils from Canadian manufacturers.

251 **Flooring.**—A **London** firm engaged in the flooring and paving industry wishes to get into correspondence with Canadian manufacturers who can supply maple wood flooring blocks in large quantities.

252 **Flour.**—A **Newcastle-on-Tyne** firm asks for prices and particulars from Canadian exporters of flour.

253 Former Canadian now residing in **Auckland, New Zealand,** is open to represent Canadian manufacturers of men's and women's wear of all kinds, also of Canadian specialties. References. Is a good business man, and should be able to place good orders.

254 **Go-carts.**—A **Birmingham** firm wishes to hear from a Canadian manufacturer of go-carts.

255 **Iron Pipe for Gas Lines.**—There is a good opening in Ontario for the sale of Iron Pipe for pipe lines in the gas fields. This pipe must be butt-welded, and specially threaded, and able to withstand a pressure of about 600 lbs. Most of this business now goes to United States firms, and there is no reason why Canadian firms should not get some of it. Specifications can be secured from the gas companies.

256 **Legging Leather.**—A **Lancashire** firm desires to correspond with Canadian manufacturers of split legging leather.

257 **Linseed Meal Cake.**—A **Liverpool** firm asks for prices of linseed meal cake from Canadian manufacturers.

258 **Lime Juice Filter—Canadian** firm is in the market to purchase Filters used in the manufacture of Lime Juice.

259 **Manufacturer's Agent.**—A resident of **Brussels, Belgium,** is anxious to represent Canadian manufacturers of special machinery and tools, machine tools, etc., and fine machinery, Belgium and France. Is well connected with the machinery buyers of those countries and has had considerable experience.

260 **Manufacturer's Agent**—Firms desiring to open up business with **Austria** should communicate with this office, as notice has been received that a representative of the Austrian Government will shortly tour Canada for the purpose of establishing import and export relations with reliable Canadian firms.

261 **Manufacturer's Agent—Canadian** firms seeking to develop business with British India can obtain the address of a reliable firm of Commission Agents in **Delhi** at this office. This party is prepared to advertise extensively, and has a large staff of travellers covering all the principal cities of India.

262 **Maple Planks and Flooring.**—A **Manchester** firm asks for prices and dimensions of maple planks and flooring from Canadian exporters.

263 **Maple Handles.**—A well-known **Mainz, Germany,** merchant is open to purchase Maple Handles for forks, shovels, spades and hoes. Considerable business in sight.

264 **Meat, Fruit, etc.**—A correspondent in **Scotland** connected with the wholesale and retail grocery and provision trade is desirous of representing Canadian canners of meat, tongues, fruit, etc.

265 **Millers' Offals.**—A **Tynside** firm is open to hear from Canadian exporters of millers' offals—with prices and full particulars.

266 **Mica.**—A **Manchester** firm asks for samples and prices of mica, rough trimmed, and rectangular trimmed, from Canadian exporters.

267 **Nickel.**—A **Manchester** firm invites correspondence from Canadian exporters of nickel.

268 **Office Furniture, etc.**—A **Bradford** exporting house having a large trade connection in South Africa, wishes to get in touch with Canadian manufacturers of roll-top desks, office furniture, and similar manufactured wood goods.

269 **Office Furniture, Metal Office Fittings, Pottery Products.**—A wholesale firm in **Cleveland, Ohio,** is open to purchase the above articles for their Canadian business. Will pay cash, and would like quotations on large quantities f.o.b. where manufactured.

270 **Pig Iron.**—An importing and exporting firm of foreign merchants at **Yokohama** and **Kobe (Japan)** desires to form business connections with exporters from Canada of pig iron, bright and galvanized iron wire and wire nails.

271 **Pine Doors.**—A **Manchester** firm asks for prices and dimensions of pine doors from Canadian manufacturers.

272 **Pick and Hammer Handles.**—A **Liverpool** firm asks for prices of pick and hammer handles from Canadian manufacturers.

273 **Pitwood.**—Particulars of further openings for the sale of pit props in **Wales** can be obtained at this office. This should provide an outlet for spruce lumber waste in the mills in Eastern Canada.

274 **Pork Products.**—Well-known **Ontario** Pork Product manufacturing firm is anxious to secure representatives in various Canadian cities and towns, and would welcome correspondence from prospective agents.

275 **Razor Strop Leather.**—A **London** firm invites correspondence from Canadian manufacturers of razor strop leather.

276 **Representative.**—Inquiry has been made by a **London** agent offering good references and having an extensive knowledge of trade conditions, for names of Canadian firms desiring to appoint a representative in London to push their products or to take up any article for which a demand could be created in Great Britain.

277 **Representative.**—A **London** firm desires to be placed in touch with first-class Canadian firms who may wish to be represented in the United Kingdom. They have had experience in handling grain, flour-milling offals, tallows, fats, general product, etc., ores, minerals, wood pulp and paper.

278 **Rock Phosphate, Cattle Bones and Hoofs.**—There is an opening in Japan for firms who can ship this material to that country. The Secretary will be glad to hear from any parties who can engage in this business.

279 **Sawn Ash or Elm.**—A **Manchester** firm asks for prices of sawn ash or elm 1 in. x 2 in. wide and up, 12 feet long and over, from Canadian exporters.

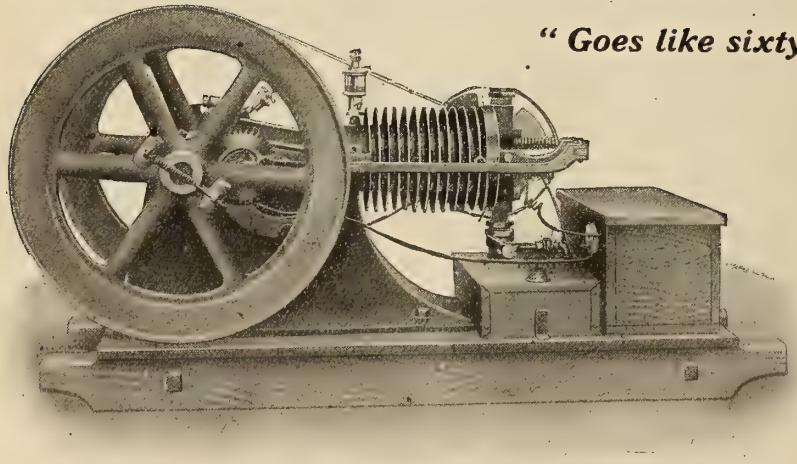
280 **Sisal Ropes.**—**Leeds** firm using considerable quantities of sisal ropes inquires for Canadian manufacturers.

281 **Skewers, etc.**—A **London** firm would be pleased to hear from Canadian manufacturers of skewers, and also of other manufacturers of wood who are in a position to fill orders

282 **Shovel Eye Handles.**—Inquiry is made by a London firm of hardware merchants for the names of exporters in Canada of shovel eye handles and straight arms.

283 **Tool Handles, Wheel Spokes, etc.**—An old-established and well-known firm in the north of England, with a large con-

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THE DELANY & PETTIT Co. LIMITED.
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THE GILSON
AIR COOLED ENGINE
SELLS QUICK AND STAYS SOLD
THE LIVE LINE FOR THE DEALER

Air Cooled Sizes		*Water Cooled Sizes*			
1	H.P.	2	H.P.	7	H.P.
1½	"	3¼	"	8	"
2½	"	4½	"	12	"
5½	"	6	"	15	"

Our Net Prices will Surprise You

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Address Enquiries to Dept. 4 GUELPH, Ont., Can.

nection among buyers of pick and other tool handles, wheel spokes and rims, etc., is desirous of hearing from a Canadian manufacturing firm with a view to acting as agents for the sale of these goods.

284 **Tool Handles.**—A **Yorkshire** firm is in a position to dispose of large quantities of pick and other tool handles, and inquires for the names of Canadian manufacturers.

285 **Wood Slats.**—A firm in the north of **England** desires to hear from Canadian timber millers who can supply them with wood slats 5 feet long, 7/8 in. wide, 3/8 in. full thick (with allowance for arched surface), suitable for use in repairing harvester canvases.

286 **Wood Rollers.**—A **Yorkshire** firm makes inquiry for Canadian firms which can supply them with quantities of wood rollers for lawn mowers.

287 **Wood Handles.**—Inquiry is made for Canadian firms manufacturing wood handles for ploughs by a **Sheffield** firm.

288 **Wood-Working Machinery.**—An English firm of manufacturing joiners desires to have particulars of any new improvements, etc., in wood-working machinery, and is open to hear from Canadian firms interested.

289 **Wood.**—An important inquiry is made by a Leeds firm for Canadian manufacturers of 2, 3, 4 and 5-ply wood (chiefly 3 and 4-ply), suitable for the manufacture of trouser stretchers.

290 **Wood-meal and Wood-flour.**—A **London** firm, open to take large quantities of wood-meal or wood-flour if the price is right, wishes to be placed in touch immediately with Canadian firms who can export.

291 **Wood Dowels.**—Well-known, old-established **Birmingham England,** firm of cane and dowel dealers is open to purchase 50,000 lots of wood dowels 36 inches and longer, in diameters ranging from ¼ to 1¼ in. Will pay cash against documents, and quotations should be based f.o.b. Canadian port with freight rate to Liverpool. References.

292 **Wheel Spokes, etc.**—A well-known firm of coach ironmongers in **Yorkshire** desire to have prices and other particulars from Canadian firms making wheel spokes, bent hickory rims, hubs and "Warner wheels."

293 **Yellow Pine.**—Inquiry is made for Canadian exporters of yellow pine by a north of England firm who wishes to have prices and other particulars for direct shipments.

THE FRANZ SYSTEM FOR FUEL SAVING.

One of the latest types of fuel saving devices for stationary and locomotive boilers has just been placed on the market by Robert S. Franz, Etna, Pa. The device is also applicable to rolling mill furnaces, tin and sheet mill furnaces, etc.

The system, as patented by Mr. Franz, consists simply in distributing heated and compressed or forced super-heated hot air through contracted air-pipes, or air passages, so as to secure a more perfect and thorough combustion within the furnace—a series of air pipes and air passageways in such position as to create a forced draught in sufficient quantities in order to obtain a perfect combustion and upwards through the fire, and also by counter cross current of heated air from both sides of the furnaces to cause a cross current action contrary to the draught or cross-wise of the furnace flame or



ROOFS That Stay Roofed

You cannot roof for less money and save money—nor for more money and spend the money so wisely—than you do when you choose the perfected steel shingle which anybody can put on right with the simplest tools.

"OSHAWA"
Double Galvanized
STEEL SHINGLES

Double-galvanizing makes it rust-proof and does away with all need for painting an Oshawa-shingled roof. Wind, rain, snow and weather proof, and

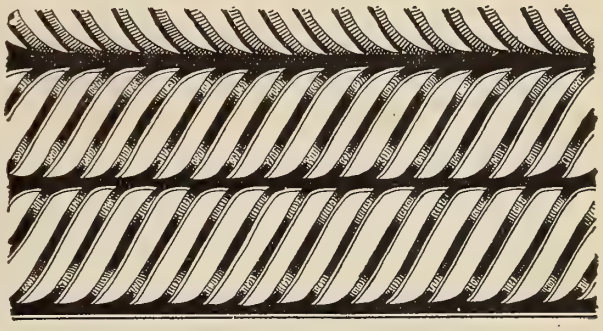
GUARANTEED FOR 25 YEARS
GOOD FOR A HUNDRED

Makes buildings lightning proof, too, and fireproof so far as the roof is concerned. Costs no more than wood shingles to start with, and far less in the long run.

Send for Booklet and Sample Shingles
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THE HOUSING PROBLEM

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them to construct the cheapest, DURABLE dwelling known, with our

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CHEAPEST TO BUILD AND MAINTAIN.
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MONTREAL PRESTON TORONTO

draught, whereby you compel such gases to be forced and generated into heat.

When heated air is thus forced from each side, effectually covering the whole space above the grate bars or fire and between the side walls, it tends to direct the unconsumed gases or products of combustion into the fire, thus by forcing the supply of heated air into the combustion chamber a current of air and gases is directed in such a manner as to produce an oscillated and a whirling circulation and counter cross-wise current of the air and gases, or products of combustion, and at the same time a contrary cross-wise pressure of forced heated air and gases, thereby securing an inter-mixture of heated air supply with the unconsumed gases, effecting a complete burning of said gases and the products of combustion carried therewith in suspension before their final escape from the furnace; furthermore ensuring the highest efficiency of fuel in connection therewith by utilizing the heat and gases otherwise wasted.

The results are materialy advanced in larger capacity and the temperature of the gases is secured and affords the highest degree of heat and combustion obtainable, and will burn low grades of fuel; advances the steaming capacity of boilers to their maximum. Also furnaces, which makes feasible a material increased capacity without enlarging the plant. It heats quickly and equally all over the furnace. The heat is not such a heat as to oxidize or crystallize the metal, but an intense, soft heat. It saves fuel, and abolishes smoke by utilizing the wasted heat and unconsumed gases, and less waste, such as ashes.

This invention allows the construction of furnace improvements that will be extremely simple, practical, strong, durable and comparatively inexpensive to maintain by manufacturers, and will be highly efficient in their uses.

In several establishments in Pittsburgh a 30-day test was made of the furnace, burning slack and run-of-mine coal. One test showed a saving of 30 per cent. in the fuel bills, the furnace boiling 11 1-10 pounds of water to the pound of coal consumed. Another concern made a saving of from 20 to 25 per cent. in its fuel bills by the use of the Franz system.

Supply of Meerschaum.

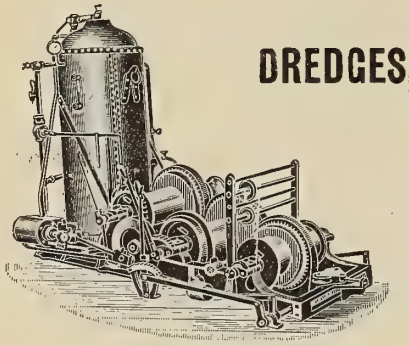
Meerschaum, so highly prized by pipe manufacturers, and which has heretofore come from Turkey in Asia Minor, has recently been found in New Mexico, and the extreme scarcity which has characterized its production during the past few years will, according to a report published by the Washington Department of Commerce, soon be at an end. The new mines are located in the Diablo range of mountains, about 20 miles northwest of Pinos Altos, to which a branch of the Santa Fé Railroad runs from Deming. There have been stripped two true fissure veins continuous for 1,500 feet each, in which there is carried between strongly defined walls meerschaum in widths of 20 inches. "All of the veins appearing are vertcial in position, and give indisputable evidence that they were formed through the splitting apart of volcanic conglomerate, a theory still further confirmed by the blow-outs and deposits afloat that have been thus far discovered, and finally by the fact that 'kidneys' of pure meerschaum in various sizes are now obtainable from this surface material, although it has been subjected to the decomposing effects of the elements, impregnation of vegetable matter, and the seepage of other minerals in solution into it for centuries." A waggon road is now being built from the mines to Pinos Altos, a distance of 20 miles, and when this is completed the meerschaum will be marketed.—*American Exporter.*

M. BEATTY & SONS, LIMITED

WELLAND, ONT.

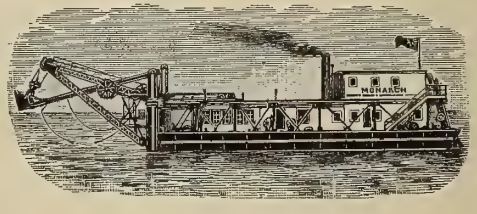
MANUFACTURERS OF

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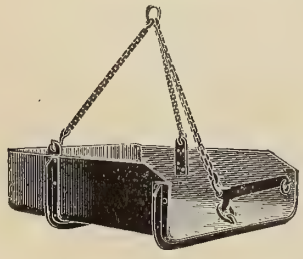


HOISTING ENGINE WITH NO. 2 SWINGER ATTACHED

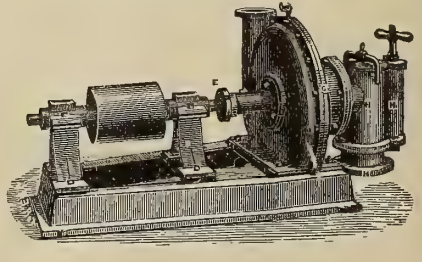
Stone Derricks
Clam Shell Buckets
Steel Skips
Coal and Concrete Tubs



Mine Hoists
Hoisting Engines
Submarine Rock Drilling Machinery



Centrifugal Pumps for Water and Sand

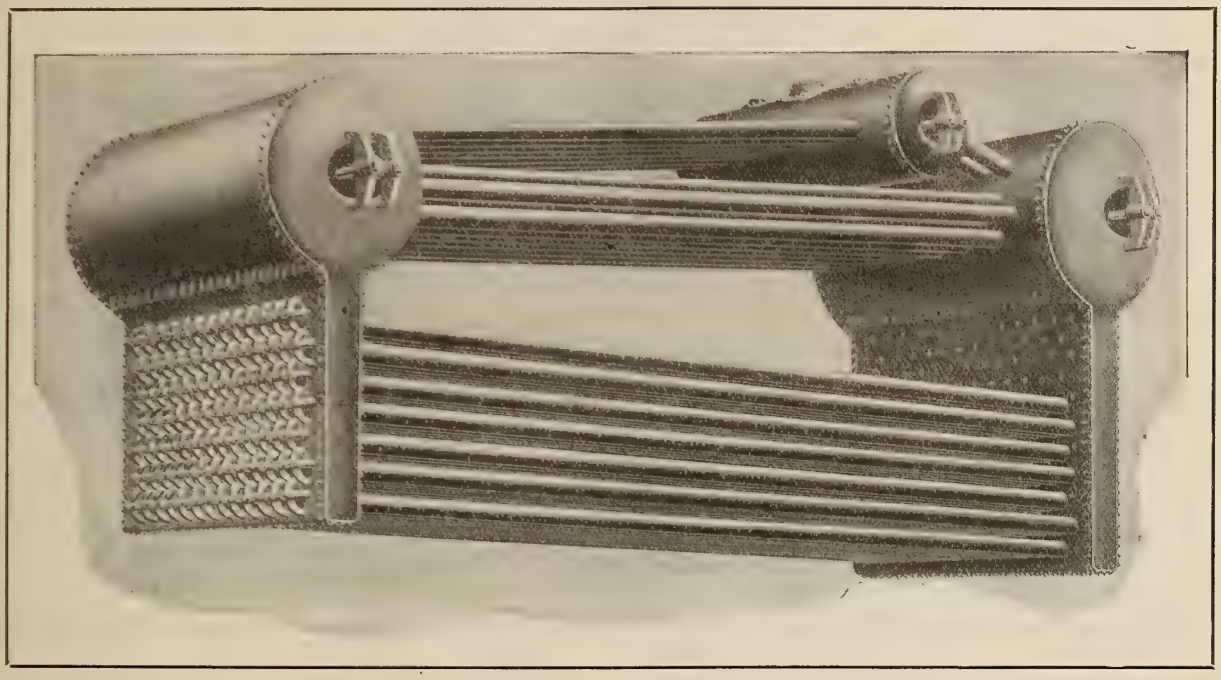


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See Bulletin No. 32

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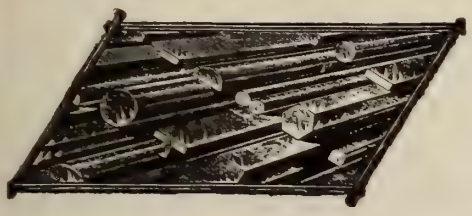
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LARGE STOCK OF

Rounds, $\frac{1}{16}$" to 6"
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Flats, $\frac{3}{16}$" x $\frac{1}{8}$" to 3" x $1\frac{3}{4}$"
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COLD-DRAWN AND DIE-ROLLED STEEL
ROUNDS, SQUARES, HEXAGONS AND FLATS

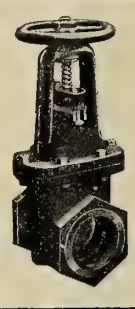
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STRICTLY HIGH GRADE. TESTED & PACKED


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THE STEEL RAIL MILL OF

The Algoma Steel Co., Limited, Sault Ste. Marie, Ont.

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A.S.C.E. STANDARD SECTION

Steel Rails

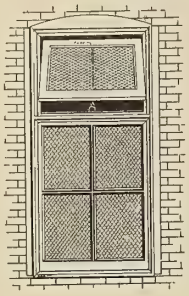
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London	1240	Brockville	105
Hamilton	97	Owen Sound	123
Kingston	45	Petrolea	22
Belleville	67	Port Hope	22
Berlin	180	Stratford	123

PURE { TURPENTINE and LINSEED OIL

BEST { V.M. & P. NAPTHA and GASOLINES
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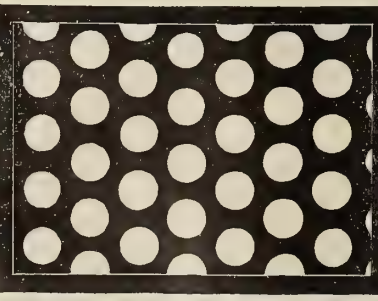
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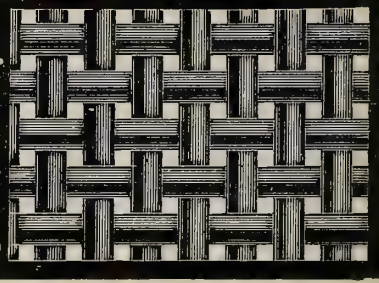
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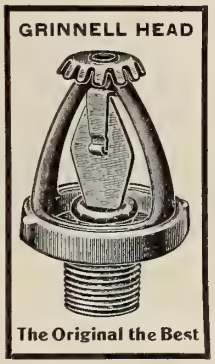
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Executive Council

NOVEMBER MEETING.

THE regular monthly meeting of the Executive Council was held in the Council Chamber of the Board of Trade, Toronto, on Thursday, November 21st, at 2 p.m.

Honorable J. D. Rolland occupied the chair, and other members present were: Messrs. C. C. Ballantyne, Montreal; G. Frank Beer, Toronto; Henry Bertram, Dundas; Geo. Booth, Toronto; S. B. Brush, Toronto; J. C. Casavant, St. Hyacinthe; H. Cockshutt, Brantford; Hon. E. J. Davis, Newmarket; W. R. Dunn, Hamilton; L. V. Desseau, Toronto; P. W. Ellis, Toronto; J. D. Flavelle, Lindsay; Atwell Fleming, Toronto; H. W. Fleury, Aurora; E. J. Freyseng, Toronto; W. M. Gartshore, London; S. Harris, Toronto; E. G. Henderson, Windsor; J. Hewton, Kingston; R. Hobson, Hamilton; J. B. Maclean, Toronto; C. R. McCullough, Hamilton; R. McLaughlin, Oshawa; W. K. McNaught, Toronto; J. J. McGill, Montreal; J. P. Murray, Toronto; A. S. Rogers, Toronto; Frank A. Rolph, Toronto; Louis Simpson, Montreal; Wm. Stone, Toronto; J. O. Thorn, Toronto; W. B. Tindall, Toronto; R. L. Torrance, Guelph; J. Turnbull, Toronto; Geo. W. Watts, Toronto; C. I. I. Wilson, Ingersoll; D. Wilson, Collingwood; W. H. Wyman, Montreal; R. J. Younge, Montreal.

Letters of regret from members unable to be present were reported from the following: Messrs. Robt. Munro, S. W. Ewing, D. Morrice, D. Lorne McGibbon, Arthur W. White, W. H. Rowley, J. S. N. Dougall, T. S. Hetherington, Alex. Saunders, Wm. Small, T. H. Estabrooks, R. Thomson, Wm. Robins.

The minutes of the October meeting as published in INDUSTRIAL CANADA were taken as read.

The following business arising out of the annual meeting was then disposed of:

Resolution *re* Exhibition.

The Secretary reported that in accordance with a resolution adopted at the annual meeting on September 26th, the Executive Council were to devise a method for improving the services offered by the Association in the matter of foreign exhibitions. Referred to the Commercial Intelligence Committee for investigation and report.

ELECTION OF NEW MEMBERS TO THE COUNCIL.

A number of names were reported by the Secretary, of members elected to the Executive Council at the annual meeting, who were also *ex-officio* members of the Council, either by virtue of their chairmanship of a section, or of a standing committee. He enquired whether the Council wished to nominate other men in their places. It was pointed out that this would be a violation of the by-laws, so it was decided to take no action.

PRESIDENT.

Mr. Rolland reported that as President he had been invited to attend a banquet of the Peterboro' Board of Trade on Wednesday, the 20th where he had taken occasion to make a plea for Canadian made goods and the adequate protection of Canadian industrial enterprises.

TREASURER.

The Treasurer presented a statement of receipts and disbursements for the month ending, October 31st, showing a balance of cash on hand amounting to $15,609.37. On motion of Mr. Booth, seconded by Mr. Ballantyne, the report was adopted.

FINANCE.

The report of the Finance Committee, read by the Chairman, Mr. Tindall, recommended for acceptance the accounts of the month, amounting in all to $3,228.95. It further recommended the engagement of Mr. Wilton C. Eddis to make a monthly audit of the Association's books, also the engagement of Mr. Coughlin and Mr. Gillies on the staff of INDUSTRIAL CANADA.

Report was made that a meeting had been held with the directors of the Mutual Insurance Companies to adjust expenses incurred by the Association in connection with the organization of these companies. It had been mutually agreed that the companies would make themselves responsible for the actual cash expenditures made on their behalf, together with an allowance for the services of Mr. Heaton, bringing the total amount up to $3,661.04. Of this amount $661.04 was to be paid on or before January 1st, 1908, and the balance in three annual payments of $1,000 each on the first of each succeeding year, with interest at 4 per cent.

The adoption of this report, moved by Mr. Tindall, seconded by Mr. Booth, was then carried.

PARLIAMENTARY.

The report of the Parliamentary Committee was presented by the Chairman, Mr. John Turnbull.

Ontario Factory Inspection.

Dealing with the above matter it was reported with regret that the Ontario Government had appointed three of the four new factory inspectors from the ranks of organized labor. The committee felt, in view of the strong and repeated representations they had made to the Government on this subject, that the action finally taken could only be regarded as an indication that in the eyes of the Government the manufacturers were a body to be ignored. The committee expressed its willingness to take such further action as the Council might see fit to advise.

Other paragraphs of the report read as follows:

English Labour Agents Misrepresenting Canadian Conditions.

Complaint is made by two members of the Association that advertisements are being inserted in British papers without authority by irresponsible booking agents who state that a large number of hands are wanted at their respective factories for steady employment. These advertisements are the means of bringing people to Canada for whom there is at present no work, and as they have little or no money they must either return or become a burden on the community. Many booking agents also appear to be in the habit of furnishing emigrants letters of introduction to people on this side with whom they have had absolutely no dealings before, greatly to the annoyance of employers, who are not in need of help.

Your committee would recommend that every case thus reported be brought to the attention of the Department of Labor at Ottawa with the request that the guilty parties be prosecuted under the Merchants' Shipping Act of Great Britain.

Government Regulation of Telegraph Rates.

Judging from the number of complaints that are being made regarding delays in the transmission of telegrams, some of which prove very costly, and other unsatisfactory features of the telegraphic service, your committee is of the opinion that it is time the telegraph companies were brought under the jurisdiction of the Board of Railway Commissioners. It is suggested, therefore, that a memorial be addressed to Sir Wilfrid Laurier and the members of the Cabinet, urging that legislation to this effect be enacted forthwith.

Workmen's Compensation.

Satisfactory progress is being made towards the collection of information on the above subject, and by the time the Ontario Legislature meets the committee hopes to have a definite proposal to bring forward. It is understood the Government has pledged itself to introduce a measure at the next session, so that prompt action on the part of the Association becomes necessary.

Meanwhile the Montreal and Quebec branches have appeared before the Labor Accidents Commission of Quebec Province, advocating a system whereby all workmen injured in the discharge of their duties, other than those who were at the time intoxicated or wilfully and criminally disobedient, be given compensation without having to have recourse to expensive litigation. While not expressly so stated this recommendation involves the principle of compulsory accident insurance, upon which your committee is inclined to look with some favor. A counter proposition is to enact permissive legislation under which employers insuring their workmen up to a certain amount would be relieved of liability for compensation under the Act. In any event the views of the manufacturers in the two provinces seem to coincide sufficiently to make it certain that they will work in harmony.

The clause relating to the appointment of the new factory inspectors provoked a long discussion, which finally resulted in the passing of a motion that a strong letter of protest be sent from the Executive Council to the Ontario Cabinet objecting to the appointment of three of the new officers.

RAILWAY AND TRANSPORTATION.

The report of the Railway and Transportation Committee was presented by the Chairman, Mr. W. R. Dunn. It read in part as follows:

Readjustment of Rates.

Notwithstanding assurances given that the new east-bound rates would become effective on November 15th, the manager reported the receipt of a communication from the Chairman of the Advisory Committee of the Canadian Freight Association that it was impossible to give any definite information as to when the new rates would take effect owing to some unexpected difficulties in connection with the new tariffs. The committee protested vigorously against any further delay. The following resolution was adopted, and the manager instructed to forward it by wire to the Secretary of the Commission:

> "Canadian Manufacturers' Association Transportation Committee meeting to-day calls attention of Board to failure of railways to put in effect east-bound rates under Board's order, July 6th. Notwithstanding promise to co-operate and publish rates quickly, and subsequent repeated promises to put rates in effect not later than November 15, letter from MacInnes, Chairman Freight Association, now advises impossible, say when rates can be effective. We protest against railways being allowed further delay. Request Board take immediate action enforcing order November 15. Answer requested."

Since the meeting of the Committee a copy of the order of the Board, dated November 13th, has been received, directing that the revised tariffs of freight tolls referred to in the order of the Board, dated July 6th, 1907, come into force from points in Canada not later than January 1st, 1907.

Express Tariffs and Classification.

The Board of Railway Commissioners have issued an order extending until March 1, 1908, the time for the approval of express tariffs and classification, and that pending the approval of the said tariffs the express companies shall not charge any tolls higher than those which were charged on the first day of March, 1907.

Toronto Interswitching.

The Manager reported that the Railway Commission had granted a hearing in this case on November 5th, and was instructed to press for an early decision.

All Rail Rates to the Northwest.

The new all-rail rates from Eastern Canada to the Northwest have been announced to take effect December 1, 1907.

New Freight Rates out of Winnipeg.

A vigorous protest has been filed with the Board of Railway Commissioners by the Winnipeg Branch of the Association, the Board of Trade and the Shippers' and Jobbers' Association of Winnipeg, against the new schedule of freight rates which the railways propose to put in effect November 25th. These rates cancel the traders rates which have been in effect for years, and bring about a general increase. The new tariff is the result of an order made by the Commission, because of representations made to them by Portage la Prairie, which claimed that discriminatory rates were in force from Winnipeg west, giving Winnipeg wholesale merchants a preference over merchants and others in outside communities.

The discrimination complained of has been done away with by advancing the rates out of Winnipeg so as to place them on a uniform basis with the towns complaining, instead of continuing and extending the old basis of rates which has been in force for a great many years. The Department is in communication with the Winnipeg Branch, who are sending full information.

Bill of Lading.

The Manager reported having attended a meeting of shippers and hearing before the Interstate Commerce Commission in Washington on October 14th, 15th and 16th, at which the adoption of a simple form of bill of lading was strongly urged. Your committee are of the opinion that this important matter has been too long delayed, and that we should press vigorously upon the Board of Railway Commissioners for the clean bill of lading which the Association has asked. We, therefore, recommend that a special committee with the Manager wait upon the Board of Railway Commissioners during the visit of the Executive to Ottawa on December 5th, with a view of getting early action.

Reorganization of the Board of Railway Commissioners.

Your committee recommend that a small deputation be appointed to wait upon the Government on December 5th, urging upon it our views in regard to the re-organization of the Commission.

It is also recommended that a special committee wait upon the Board of Railway Commissioners and press our claims for reciprocal demurrage and weighing of car-load traffic, the

committees to be arranged for by the Secretary and the Manager of the Department.

COMMERCIAL INTELLIGENCE.

The report of the Commercial Intelligence Committee was presented by Mr. L. V. Dusseau. The following are among the matters dealt with:

Inter-Imperial News Service.

A communication has been received from the Vancouver Board of Trade asking the Association to endorse its resolution favoring the establishment of an Inter-Imperial News Agency. While the idea of obtaining more and better news items from all parts of the Empire is one which your Committee think will readily commend itself to the members of the Association, they feel that the subject is one they are scarcely competent to deal with, and they would recommend therefore that it be referred by the Council to a special committee consisting of newspaper men and others familiar with the situation.

Commercial Agency Service, West Indies.

Following the recommendation contained in this Committee's report to the Annual Meeting in the above matter, a letter has been sent to the Minister of Trade and Commerce strongly favoring the replacement of the present commercial agents in the West Indies by a Trade Commissioner, who will give his entire time to the work, and will travel about from place to place, keeping the Ottawa office advised as to changing trade conditions. Your committee has reason to believe that the Government are already considering this step, and the receipt of the Association's letter should further strengthen their hand.

It is also stated that the Department is considering the appointment of a special commissioner for New Zealand, in this way relieving Mr. Larke, of Sydney, of a portion of his duties to which he is unable to give proper attention.

Weights and Measures in China.

A letter has been received from the Secretary of the British Weights and Measures Association stating that an Imperial edict has been issued in China requiring the Board of Revenue and Commerce to introduce a uniform system of weights and measures throughout the Empire, the standards of which are to be fixed on or before April 6th, next. In view of the fact that there is a possibility of the Chinese Government making a radical change which would seriously embarrass Canadian commercial interests at present trading with that country, it is suggested that the Association recommend the Canadian Government to work in harmony with the British and United States Governments, who are already known to be interesting themselves in the matter.

In addition to the above the report recommended that the INDUSTRIAL CANADA Committee be asked to take up at once the question of getting out a new edition of the Trade Index. It also suggested that the Dominion Government be asked to extend an invitation to Sir Joseph Ward to visit Canada next year.

The following committee was appointed to report on the question of an Inter-Imperial News Agency: Messrs. J. B. MacLean, J. F. MacKay and C. T. Pearce.

RECEPTION AND MEMBERSHIP.

The report of the Reception and Membership Committee as read by the Chairman, Mr. Beer, recommended for acceptance twenty-five applications for membership, the names of which will be found elsewhere.

Local Dinners.

Hamilton and Chatham were recommended as suitable places for the holding of Association dinners during the winter. The former will likely be held in January and the latter in March.

The adoption of the report, moved by Mr. Beer, seconded by Mr. Fleury, was then carried.

INDUSTRIAL CANADA.

The Chairman, Mr. C. R. McCullough, read the report of the INDUSTRIAL CANADA Committee, the principal items of which were recommendations regarding the appointment of Mr. D. B. Gillies as advertising solicitor, and of Mr. D. M. Coughlin, as editorial wr ter.

The report also referred with satisfaction to the paper's continued prosperity, the net revenue for the three months ending October being approximately $1,178.

TARIFF.

The report of the Tariff Committee was read by the Chairman, Mr. P. W. Ellis, as follows:

Undervaluation Owing to Money Stringency.

Correspondence was read by the Secretary which had passed between himself and the Minister of Customs relative to the need for the utmost vigilance on the part of customs officials to guard against under-valuation likely to arise as a result of the present financial stringency in the United States. From information furnished by members of the committee who were present it is believed that the warning was a timely one, as there is abundant evidence of the fact that goods are being slaughtered. To furnish conclusive proof that such is the case is however a different matter.

The recommendation of your committee is that a carefully worded letter be sent at once to every member of the Association requesting him to furnish the Department at Ottawa with full particulars of every case of undervaluation or different interpretations of the tariff at different ports of entry which comes to his attention, and at the same time to furnish a copy of his complaint to the Secretary who, through the committee, will undertake to follow the matter up vigorously. It is proposed to advise the Minister beforehand fully of the steps to be taken in order that he may feel a personal interest and responsibility in a matter about which he has been consulted.

Leeway in the Dumping Regulations.

Consideration has again been given to the recommendation of the Montreal Branch to the effect that the leeway in the dumping regulations be disallowed. While the members of your committee are mostly favorable to the recommendations, it is apparent that certain interests are opposed to any change unless they are specially taken care of. A conference will be arranged among these interests before the next meeting of the Council, and it is hoped that an amended recommendation can then be brought forward which will meet with unanimous approval.

Memorial of Pulp and Paper Section.

In a recent interview with the Government the Pulp and Paper Section petitioned for legislation to prohibit the export of pulpwood from Canada. A letter has been received from the section asking the Association to endorse their petition. This your committee is pleased to recommend, and it is suggested that the Government be advised at once that the Association is in full accord with the memorial of the Pulp and Paper manufacturers.

General Plan of Campaign.

The above subject has again been discussed, and a number of very valuable suggestions have been made, upon which it is hoped a recommendation can be brought forward in the near future. The means which it is proposed to adopt to guard against undervaluation form of course one of the important features of the programme. Before going further, however, it is felt that little progress can be made until the Association has created a Tariff Department under the charge of a tariff expert, who will operate along somewhat similar lines as the managers of the Insurance and Transportation Departments. A sub-committee has been appointed to investigate and report at a later meeting. In framing their report they will naturally consult the Finance Committee regarding ways and means.

MONTREAL BRANCH.

The report of the Montreal Branch was read by Mr. Younge, and that of the Toronto Branch by Mr. Freyseng. Both were received, and will be found elsewhere.

Under the head of new business, Col. MacLean moved that the Parliamentary Committee be asked to consider the appointment of a permanent secretary, whose duty it would be to confine himself almost entirely to legislative and political work. Carried.

The President called attention once more to the meeting in Ottawa on December 5th, and expressed the hope that there might be a large attendance.

The meeting then adjourned.

NEW MEMBERS.

INDIAN LORETTE, QUE.

Henry Ross—Indian mocassins, mitts and gloves.

MONTREAL, QUE.

John Fee—Manufacturing machinists.

The J. W. Harris Mfg. Co.—Excavators and trenching machines.

The A. C. Lariviere Co.—Carriages and sleighs.

Wm. Scott & Sons—Picture frames.

Vulcan Portland Cement Co.—Portland cement.

Vulcan Portland Cement Co.—(D. E. Rianhard, 2nd member).

PRESTON, ONT.

E. B. Salyerds—Hockey sticks, brushes, novelty woodturning.

QUEBEC, QUE.

W. McWilliams & Son—Confectioners.

Parisian Corset Mfg. Co.—(F. A. Borden, 2nd member).

The Royal Paper Box Co.—Paper boxes.

The Royal Paper Box Co.—(J. A. Cote, 2nd member).

TORONTO, ONT.

Mervin Armstrong—Pipe threading tools.

The Atteaux Dyestuff & Chemical Co., Ltd.—Dyestuffs & Chemicals.

L. P. Bouvier—Envelopes.

The British American Oil Company, Limited.—Petroleum Products of all kinds.

The British American Oil Company, Limited.—(A. L. Ellsworth, 2nd member).

Canadian Machine Telephone Co., Ltd.—Telephone Apparatus.

Dominion Regalia Co., Ltd.—Society Regalia.

H. Gagnier, Limited.—Trade Journals, Publishers of "Saturday Night."

Grip, Limited.—(G. A. Howell, 2nd member)

Ontario Metal Novelty Mfg. Co.—Metal novelties, bathroom fixtures & specialties.

Schofield Holden Machine Co., Ltd.—Special machinery motor boats, gasoline engines.

Sexton & Co., Limited.—Grilles, Art work goods, Turnings, Dowels, etc.

Ex-Officio Members.

Through an oversight the ex-officio members of the Toronto Branch Executive were omitted from the list published in the October INDUSTRIAL CANADA.

The ex-officio members, who comprise all the past Chairmen of the Branch, are as follows:

W. K. George, W. P. Gundy, J. O. Thorn, J. P. Murray, R. A. Donald, W. B. Tindall, and John Firstbrook.

TORONTO BRANCH.

The first of the series of monthly luncheons, given by the Toronto Branch, was held at McConkey's restaurant, on Wednesday, November 20th. Dr. Charles Sheard, Health Officer of Toronto, was the speaker, his subject being "Toronto's Water Supply and Sewage Disposal Problems," which he treated in his usual masterly fashion. As is well known, Dr. Sheard favors the immediate construction of a filtration plant at the Island by the city, which will ensure for the citizens a supply of pure water at least. This should be the first concern of the city, to be followed later, says Dr. Sheard, by a comprehensive sewage disposal plant, consisting of trunk sewers, contact beds, and filtration tanks, the operation of which would render the discharge into the lake absolutely harmless. A system of this kind would mean a vast improvement of our water front, and make our harbor apleasant spot instead of the cesspool, which it closely resembles now. The cost of the two schemes combined would be $5,250,000, the water filtration plant alone costing $1,750,000, and the plants can be constructed independently of each other.

Dr. Sheard spoke in very convincing style, and by means of a blackboard, maps, and diagrams, succeeded in giving his hearers a practical idea of what the two schemes mean, and how they would make Toronto a cleaner and, therefore, a healthier city. The speaker was listened to with great attention and interest throughout, and at the close of his remarks Mr. W. B. Tindall, who presided, voiced the feelings of all present in moving a hearty vote of thanks, which was carried in the usual manner. About fifty were in attendance. The next luncheon will be held about the middle of December.

Lubrication Tests.

Some interesting and valuable experiments on friction and lubrication have been conducted for a research committee of the British Instituion of Mechanical Engineers. The work was carried out with a steel shaft driven by a belt, and provided with a journal 4 in. in diameter and 6 in. long. Upon the upper side of the journal was fitted a gun metal step, the arc of contact being appreciably less than one-half the circumference. Various means of lubrication were tested, that one found the best being a bath of oil.

The experiments showed the friction to be nearly constant at all loads, within ordinary limits; which is at variance with the commonly accepted idea that it increases in direct proportion to the load. The coefficient of friction, with bath lubrication, varies inversely as the pressure. In other words, the friction of the bearing is entirely independent of the pressure upon it, provided this pressure does not exceed 400 to 600 lbs. per square inch. The coeffiicent, again, is inversely proportional to the temperature.

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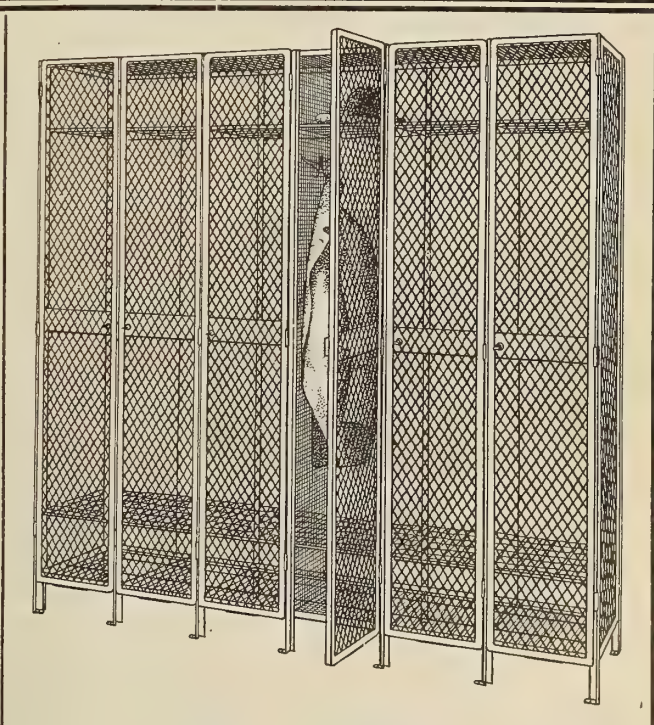
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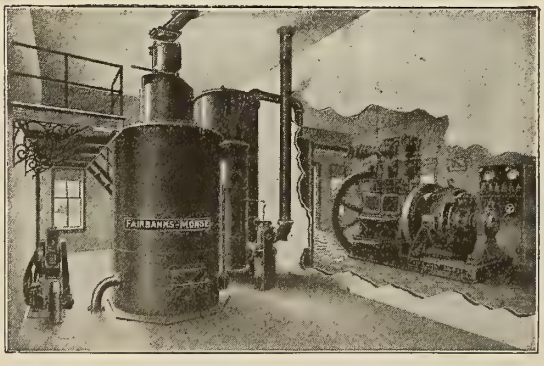
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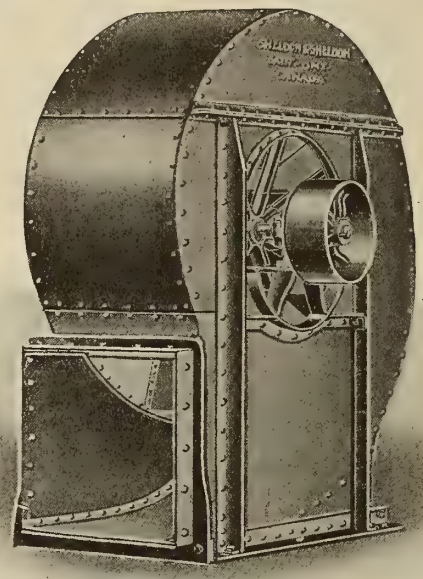
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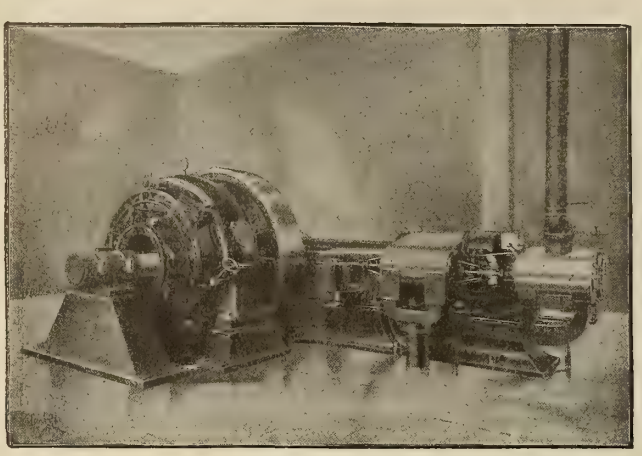
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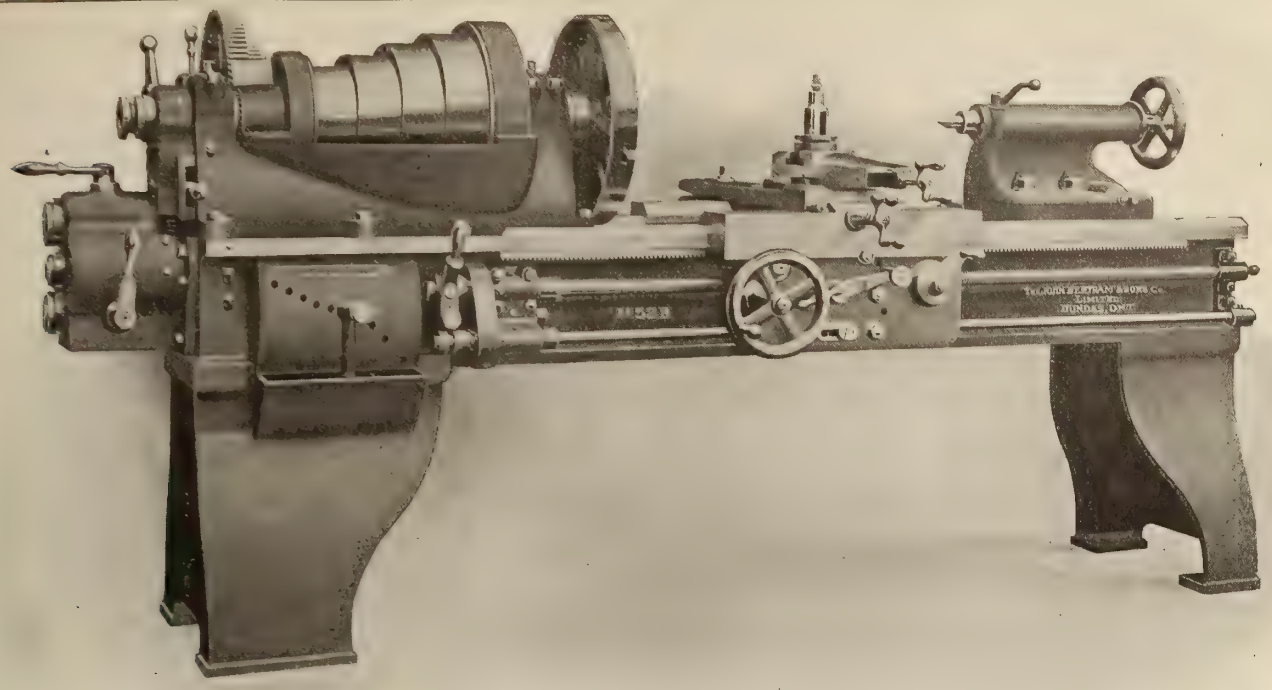
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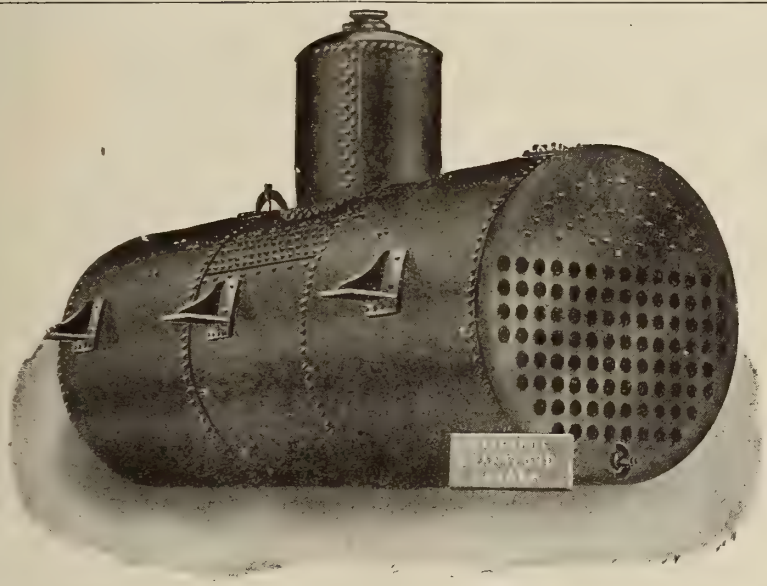
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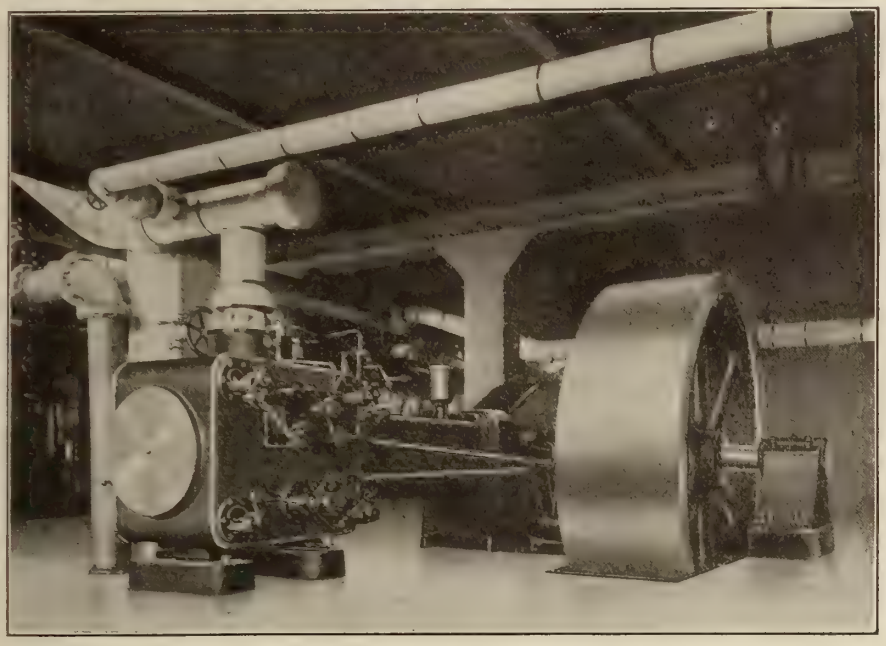
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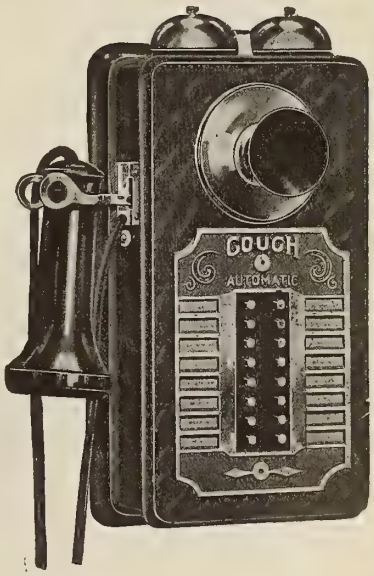
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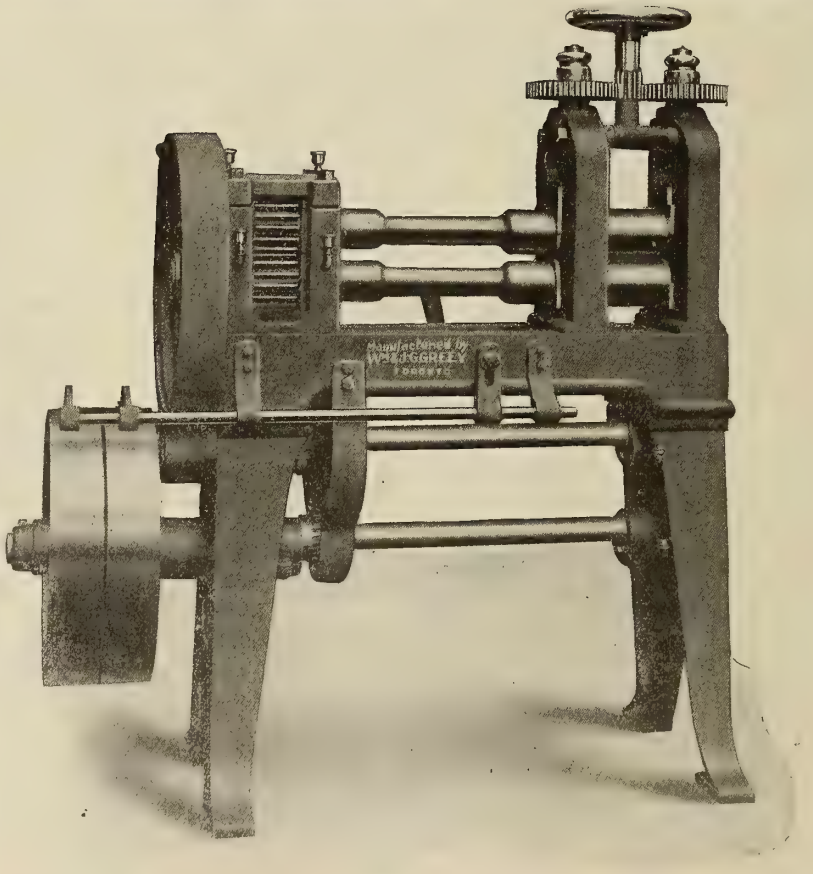
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INDUSTRIAL CANADA

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MISLEADING THE MASSES.

A CERTAIN class of vote hunters and yellow journalists take great delight in attacking capital. It is a profitable occupation from their standpoint, because the masses are envious of the man who has made a success in life, and ready to follow anyone who menaces him. This is an unfortunate state of society, but one which has to be faced by every man who has the courage to establish an industry and the ability to make it successful. It arises out of a lack of education, or more correctly perhaps, too much education of the wrong kind. The trend of public utterances designed to capture the ear of the masses is antagonistic to capital, and that portion of the press which seeks so-called popular circulation follows in the same line. These false moulders of public opinion throw discredit on success and charge that it is obtained at the cost of labor, and this harmful policy is too often successful in its purposes. It wins votes and it wins subscribers, but it is manifestly unjust to the investor, and detrimental to the country. The application of a little reason and the knowledge of a few facts are all that is necessary to demonstrate the injustice of this course; but the masses do not reason, and the facts are not given to them. It is so much easier to get a following by attacking the successful, that those who seek popular favor as a means of furthering their personal interest, do not hesitate to excite and mislead the masses by any reckless statement that serves the purpose.

How often, for instance, has the statement been made that no man can honestly become a millionaire? It is one of the most frequent declarations made by those who thrive on the discontent they are able to create amongst the people who have to work for a daily wage. It has been used as a text for elaborate essays, it has been shouted from the platform at labor meetings, and even the sensational preacher has flung it from the pulpit into the ears of his wrought-up congregation. That it is not true does not make any difference to these gentlemen. It may be that they think they are proclaiming a great truth. It is one of the weaknesses of the unsuccessful man to convince himself that the man who succeeds where he has failed, does so by means which are not strictly honest. He will not admit that his failure is due to any lack of ability on his own part. On the contrary you find the most useless tools with the highest opinion of their own cleverness. To them, therefore, success is not the result of ability. If it were, they reason, they would themselves have been successful. Consequently success, which in business means money-making, must come from the employment of means which are not strictly honest. There are so many demagogues preaching this false doctrine that the mind of the masses has become poisoned with it, and is open to receive any slander that may be uttered against the man who has succeeded.

If this sort of thing were confined to the unsuccessful it would not matter much. Their ability to do harm to themselves is probably no greater than their ability to win success in an open field. The real danger is that men of ability, but lacking in principles, seize upon the false sentiments thus created as a means of advancing their own selfish ends. They take up the fancied wrongs of labor, and charge capital with all manner of tyranny and injustice. They know the sentiment that exists amongst the masses, and by stirring up the wage-earners they perhaps win their way to Parliament. Once there they are quiet for a time, but the position is not permanent. In a few years they have to go to the people again, and in order to be able to show that they have done something, they get very active towards the close of their term, and their activity is likely to breed all manner of freak legislation. These are the men who have to be watched, for they are the real menace to the industries of the country. They are the men who are liable to tinker with tariffs, and hamper employers with unworkable labor acts, burdensome

restrictions and unreasonable responsibilities. Some of the legislation that has been proposed from time to time, would have brought ruin to the industries of this country, and as each general election approaches fresh attempts are to be expected. Fortunately our Parliament has not yet fallen into the control of this class of legislator, but the danger is always present, and those who have the country's real interest at heart cannot afford to relax their watchfulness.

In the United States this constant worrying of the investor has resulted in a panic, which has not only brought serious loss to all, and ruin to some investors, but has also driven labor out of employment, and brought hunger and misery into the home of the wage-earner. Labor unions in the hands of demagogues, self-seeking politicians pandering to popular prejudice, and yellow journalists inciting discontent, created such a sentiment against the great corporations in the United States, that even the President was carried away by it, and falling into line with the mob went marching with them against capital. Every minor fault that could be found with a corporation was magnified into a mountain of iniquity, while the real, overshadowing truth that the corporations have made the country was forgotten or ignored. The method of the President of the United States to remedy the admitted evils which have crept into many of its larger corporations reminds one of the farm lad who observed a mosquito about to sting his father on the cheek. He struck at the tiny insect with all his might, forgetting that his father was behind it. The mosquito was disposed of all right, but the old gentleman got a smack in the face that prostrated him. While President Roosevelt may dispose of many of the trust evils by his method, he is giving labor, which he professes to serve, a smack in the face that it will not recover from in a hurry. If the factories of the United States were wiped out of existence, its cities and towns would be depopulated, the chief market of the farmers would be gone, and the whole country would be rendered desolate. The men who have built up the industries may have made millions, but in the making of their fortunes they have also made the country.

We are told that this century belongs to Canada as the last century belonged to the United Staets. If the prophets are right, and everything at present indicates that they are, the next twenty-five years will see remarkable strides made in the industrial life of this country. We are now just at the beginning of an era of rapid development, both in agricultural pursuits and in manufacturing. It is, therefore, important that we should begin with a proper understanding. Labor should know at the outset that its hope lies in capital, that its future, as its present, depends upon the man who has money to invest and the courage to invest it in some line of production which will create employment. Let him understand, too, that the more money the employer makes through his first venture, the better able he will be to enlarge his plant and provide more work for more people. Get away from the false idea that the employer's success means the oppression of the employed. What his success really means is the development of Canada into a manufacturing country, where every kind of labor will be in constant demand, at fair wages and under reasonable conditions. If the false idea that labor and capital are antagonistic and should go about constantly armed against each other holds sway, industrial progress will be retarded and labor will be made to suffer. Let us understand at the beginning that labor and capital are dependent upon each other for profitable employment, and that the country in which they work together in the greatest harmony is the country in which each will find its richest reward.

THE FRENCH TREATY.

THE trade treaty with France which has been laid on the table of the House of Commons, is one of the most important documents that has ever come before the Canadian Parliament, as it marks a great departure in our national life, being a practical acknowledgment of nationhood, and our first attempt at the exercise of Imperial powers. It is also important as the first trial of the intermediate tariff, of which it will be impossible to judge fairly until it has been in operation for some time. There is no doubt it should be helpful to some lines of Canadian manufactures, but it is just as certain to hit others. Whether the gain will be greater than the loss remains to be seen.

At the very outset a blunder seems to have been made, for while we are to receive concessions from France alone, twenty other foreign countries from whom we get nothing, are to enjoy all the privileges and favors in our market that we are giving to France. The Foreign Office, as a London cable informs us, has admitted that Canada is bound by the most favored nation treaties to extend all the concessions given France under the new treaty to these twenty other foreign countries, even though they give us nothing in return. The following are the countries to get advantage of the treaty with France: All British countries, Norway, Sweden, Austria-Hungary, Denmark, Spain, Russia, Salvadore, Japan, Argentine Republic, Bolivia, Colombia, Corea, Algeria and the French Colonies, Liberia, Morocco, Muscat, Persia, Congo, Venezuela.

Can it be that the statesmen who negotiated the treaty on our behalf failed to appreciate its far-reaching effect? They must have neglected to consider this phase of the treaty, or, before concluding it, they would have tried to get something from those other countries, in return for the valuable tariff concessions they were giving. Some allowance has to be made for them in view of this being their first attempt at exercising Imperial powers, but one would have thought that even novices would not have gone so blindly into a matter of such grave importance.

The situation, as it looks at present, is that while Canada gets concessions from one country she gives concessions to twenty-one countries in return. Our maufacturers will, therefore, be able to do business with France on better terms, but they will have twenty other countries competing with them in Canada under conditions which are altogether in favor of the foreigner. It is a high price to pay for the French concession, and it looks at this stage as if we were getting decidedly the worst of the deal.

THE BY-PRODUCTS.

IN these days of small profits and keen competition the utilization of the by-product assumes an importance so great that it has become a matter of national concern. The by-product frequently represents the manufacturer's entire profit, and if it is not utilized the industry in which it is allowed to run to waste is doomed to failure. In the past, when manufacturing had less of science, the producer of any given article of commerce could afford to devote his entire attention to its production regardless of what raw material he wasted, which did not enter into his particular product. Millions upon millions of our forest wealth has been destroyed in the past through ignorance. The pulp-wood that to-day brings a large revenue to the settler was formerly burned up to get it out of the way, and we are still, in other

ways, handing over to destruction valuable materials which, in our ignorance, we acount as useless. If we are to succeed as a manufacturing nation, this waste has got to be stopped. Every ounce of value in every pound of raw material has to be extracted from it, and it has got to be done by the most scientific and cheapest methods. Our natural resources have got to be studied and experimented with, till methods are discovered whereby we will be enabled to stop the waste and reap the entire benefit of every part of them.

This is no light task, but it is one that has to be grappled with. The individual manufacturer cannot be expected to undertake it on the large scale on which it will have to be carried on, any more than the farmer could be expected to conduct an experimental farm for the benefit of his neighbors. Nor would it be reasonable to expect an individual province to undertake a work which is manifestly in the interests of the entire country. And right here let it be noted that it is also in the interest of every class in every province. If what is wasted to-day were turned to account, the main product would be produced at a lower cost and sold at a lower price and as a consequence every consumer in the land would share in the saving.

Viewed from any standpoint it is apparent that the task of discovering ways and means of utilizing to the fullest extent our natural resources of farm, forest, sea and mine is one which properly belongs to the Dominion Government, and should be conducted under Federal authority, and paid for out of the Federal Revenue. Federal schools where workmen would be given technical training, and experiments carried on with all classes of products would meet the necessities of the situation, and the expenditure would be justified as a work for the general benefit of Canada. The manufacturer would benefit by the improved methods, the workman by his increased technical knowledge, and the consumer by the decreased cost of his supplies.

The longer this work is delayed the greater will be our loss. While we hesitate thousands of dollars' worth of valuable materials are being wasted daily, and our opportunities of reaping the reward that comes to those who are first in the field with a cheaper product, are growing less. The Germans have taught all nations a lesson on the value of technical knowledge and scientific experiment. They have astonished their competitors, and what is more to the purpose, they have beaten them out in the markets of the world. If we are to hold our own, even in our own country, we must take the lesson to heart, and bestir ourselves in the direction of taking practical advantage of it. The utilization of the by-product will be the key to manufacturing success in the future, and the sooner we come to a realization of this the better it will be for the country at large. The wealth of nations, as of individuals, is built up largely on their ability to let nothing go to waste that can be made to have a value.

THE PROPOSED TARIFF COMMISSION.

THE recommendation of the Executive of the Canadian Manufacturers' Association for the appointment by the government of a permanent tariff commission, somewhat along the lines of the Railway Commission, has been misconstrued by a good many newspapers, who have ventured to comment upon it without first informing themselves of its real meaning. They jump at the conclusion that the aim of the manufacturers is to get the tariff out of politics and into the hands of a commission which will do the bidding of the Association.

Nothing could be wider of the mark than such a construction placed upon the resolution adopted at the recent meeting in Ottawa. What is wanted and what was asked for, is a commission before which the manufacturers can appear when they have a case for investigation. If such a commission were appointed, the Association would create a tariff branch, in charge of an expert, who would study each case as it came up. For instance, if a manufacturer complained that his product was not sufficiently protected, an investigation would at once be made by the tariff branch of the Association to ascertain whether or not there was a case to go before the commission. If the complaint was found not to be well founded, the party making it would be so informed, and the Association would refuse to act. If, on the other hand, a real grievance was found to exist, the case would be carefully prepared and the facts laid before the commission in a form in which they could be dealt with intelligently. Due notice would be given of any application to be made before the commission, and all parties concerned would have an opportunity of making their views known. Surely this is a fair and reasonable proposition. It means fair play to the manufacturer, and the stability of the tariff.

The papers that oppose the appointment of a tariff commission, say that the Minister of Customs has already sufficient power to rectify any grievance under which any producer may lie. That may be, but the Minister of Customs has not the time to take up individual complaints, and make a thorough investigation into their merits. The Railway Commission is kept constantly engaged investigating transportation matters. The Minister of Railways never had the time to devote to the work that is being done so satisfactorily to-day by that commission. Tariff questions are even more important and more complicated than transportation problems, and it is only fair that the Minister of Customs should get the same relief as his confrere of the railway department, and the manufacturer is surely entitled to as much consideration as the railway corporation.

If the manufacturers were asking for some unfair advantage, the case would be different. What they ask is that a principle already recognized in the matter of transportation be extended to cover the customs tariff. They want an opportunity to make known their grievances and to produce the evidence to prove their claims. To-day they have nowhere to go. The Minister of Customs cannot spare the time from the administration of his department to make exhaustive investigations into specific cases, and the introducing of them into Parliament, which is not in possession of the facts, only results in a general tariff discussion with a periodical revision that upsets business conditions and disorganizes trade. The appointment of a permanent tariff commission would prevent this periodical disorganization of business and do equal justice to all. The proposal is in every sense a reasonable one, and if it gets the consideration to which it is entitled, its advantages cannot fail to impress the government so that it will be carried into effect at the earliest possible moment.

INTERESTING FIGURES.

THE banks have been curtailing loans and preaching caution to their Canadian customers for several months past, alleging that they did not have the funds to maintain the pace which progress and prosperity had set them. When they were accused of curtailing loans in Canada in order to increase their call loans at higher rates of interest in the United States, they denied the charge with indignation. Having in mind this attitude of the banks,

there are two curious items in the annual statement of the Canadian Bank of Commerce just issued. Call and short loans show an increase of $3,694,162 during the year, and currency loans and discounts a decrease of $3,229,957 during the same period. There is no "call money" in Canada. The call and short loans, which are loans on stock, presumably in the United States, show an increase that corresponds strangely with the decrease in currency loans and discounts which are business loans in Canada. Without further explanation or comment these figures look like a "deadly parallel."

THE FARMER'S ATTITUDE.

THE Dominion Grange and the Farmers' Association have amalgamated and are in arms on the tariff issue. They declare that "the demand of the manufacturers that practical prohibition of goods shall be the permanent policy of this country, must be met by the counter demand that the protection principle shall be wholly eliminated, and the tariff reduced to a purely revenue basis." They describe the demands of the Canadian manufacturers as selfish, and proceed to show their own unselfish spirit by adopting resolutions against the proposal to grant a subsidy from the Dominion treasury to the all-red line, endorsing the action of the government in erecting forest reserves, and the encouragement given to farm forestry, urging the adoption of a parcel post system as a means of relief from extortionate express charges on small parcels, and protesting against members of the legislature holding interests in Cobalt mining enterprises.

The Canadian manufacturers have every reason to expect a more friendly feeling from the farmers of this country. The manufacturers have always urged the adoption of every measure designed to advance the interests of the farmer. The agricultural colleges and experimental farms established and maintained by public funds, have no firmer friends in this country than the manufacturers, and no other class has fought so consistently in the farmer's interest in the matter of fair transportation rates for the products of his farm. Moreover, the manufacturer is the farmer's best customer. Indeed, if it were not for the Canadian manufacturer he would have no home market at all.

In view of all this, is it any wonder that the Canadian manufacturer should be surprised and pained to find the Canadian farmer misrepresenting him, and declaring that he is actuated by selfish and unworthy motives? When the farmer declares that the manufacturer selfishly demands a prohibitive tariff, he declares what is not a fact. The manufacturer is not asking, much less demanding, a prohibitive tariff. All he asks is fair play. He does not want any increase in the tariff where it is sufficient to enable him to carry on his business at a reasonable profit. If the Canadian farmer were wise to his own interests, instead of taking up arms against the Canadian manufacturer, he would support him in his efforts to maintain the industries of this country on a good footing.

What would be thought of our city merchants if they banded together for the purpose of opposing their customers and restricting their ability to purchase? They certainly would not be looked upon as wise or judicious merchants. On the contrary it would be thought that some strange germ of madness had got a hold on them and started an epidemic of insanity in their ranks. The Canadian manufacturer is the Canadian farmer's customer, and it certainly is not wisdom on the part of the latter to deny the former a fair and reasonable chance of success. The trouble with the farmer is that he overlooked altogether the merchandising end of his business. He considers every question from his standpoint as a buyer, and fails to take into account what his interests are in his role as a merchant. If he were taught to take this broader view of his position, it is safe to say that he would revise his opinions on many important points, and the most marked change would undoubtedly be in his attitude towards the Canadian manufacturer.

ENFORCING THE DUMPING ACT.

THE scarcity of real money in the United States has placed the manufacturers of that country in an awkward position. It is not so much a question of solvency with them as one of cash. No matter how great the surplus their assets show over their liabilities, they cannot, apparently, get the actual money in hand to meet the running expenses of their factories. Real money is not to be had there, and unless they can get it from some other source to meet their pay sheets they will have to discharge their employees and close down their plants. Almost in desperation they are turning to Canada with the hope of finding relief. Scores of travelers representing United States manufacturing concerns are now in this country, sacrificing goods in return for ready money. In other words they are dumping their surplus stocks into Canada. Cuts in prices of from thirty to fifty per cent. are being offered as an inducement to Canadian merchants, regardless of the fact that Canada has a Dumping Clause intended to meet just such a situation as this.

The Dumping Clause is excellent in theory but it is difficult to enforce. It is impossible for even the most expert customs' appraiser to be so conversant with values in all lines, that he can unfailingly detect goods invoiced at slaughter prices. In ladies' costumes for instance, style is as great a factor in determining value as the fabric of which they are made. It is too much to expect customs' officials to make a study of style books and fashion plates in order to be competent judges of value in this respect. Yet, ridiculous as it seems, there is no other method by which they can acquire the knowledge necessary to detect undervaluation in this line of imports. Other instances could be mentioned, but the above is sufficient to demonstrate the difficulty of enforcing the provisions of the Dumping Clause, and the necessity there is of rendering every assistance possible to the Department? Every manufacturer in Canada should make it a duty to report promptly to the proper officials every case of undervaluation that comes under his notice. The Customs Department has a few inspectors in the United States, whose duty it is to ascertain the price in that country of goods intended for export into Canada; but their number is so small that they cannot begin to cope with a situation such as the present. It is evident, therefore, that unless everyone in Canada interested in seeing the Dumping Act enforced lends his aid in that direction, the law will bcome a dead letter.

The seriousness of the situation is perhaps not as fully appreciated now as it will be later on. Slaughter prices are naturally very tempting to the merchant, and if the process of dumping is not checked, he is likely to load himself up for some time to come, and so curtail his purchasing power that the Canadian manufacturer will be unable to dispose of his output. Moreover, as the object of these slaughter sales is to secure ready money, it is evident that if they are

allowed to go on long enough the Canadian merchant will be relieved of his cash, and this country will be in as bad a plight financially as our neighbors to the South are to-day.

The Customs officials are willing and ready to enforce the Dumping Clause, and it is to the interest of the manufacturer and, in the end, of the merchant as well, to give them every possible assistance in detecting violations of it. If we allow our market to be flooded with the surplus product of the United States factories, there will be no market for our own, and we will have a period of depression that will be real.

THE TRANSPORTATION PROBLEM.

IT is with a feeling of satisfaction that everyone interested in freight rates views the rapid development of competing lines of railways, for competition means lower rates. Mr. John Pullen, the assistant freight traffic manager of the Grand Trunk Railway, recently gave the Canadian Railway Club a very interesting talk on "The Work of the Freight Traffic Department," during which he mentioned what he said were a few of the factors entering into freight rate construction. Distance is one and, to the uninitiated it would seem that the rate should increase with the distance. Such is not necessarily the case however. On the contrary distance has often to be eliminated as the result of competition, either of water or of a rival rail line. If, he pointed out, there be two or more railways between two given points, the railway having the longer route must, of necessity, carry its freight between these two points at as low a rate as its rival which may be fortunate enough to have a much shorter line.

So much for the good effect of competition amongst railways, but the most important statement made by Mr. Pullen in his address had regard to the great advantages, from the shipper's standpoint, of water transportation. "If," he said, "a railway parallels navigable waterways then its rates must, of necessity, be kept down to the lowest possible figure, otherwise all the traffic would be attracted to the water route." This leaves no doubt, if there had been any before, of the desirability of developing to the fullest possible extent every mile of waterway that is or that can be made navigable. The money which has been spent on the St. Lawrence canals has been well invested. The people are getting a larger return from it than shows on the balance sheet, for it is not only the freight that passes up and down by boat that benefits by it, but also every pound of freight carried on the railways between points which enjoy the alternate advantages of the water route.

Rival railways reduce rates merely to a common basis fixed by the shorter line, but a navigable waterway cuts them down to the lowest possible figure at which commodities can be moved from one point to another. That the great advantage of water transportation is well understood and fully appreciated by our shippers, is evidenced every season by the mad rush to catch the "last boat" with shipments. The farmers of the West, too, strain every point to get their grain to the lake ports before the season closes, in order that it may reach the seaboard at the smallest possible cost.

As commercial and industrial progress is, in a large measure, dependent upon cheap transportation, it is surely the part of wisdom to make the most of our opportunities in that direction. No other country in the world possesses such great natural advantages in this respect as Canada, but we are not making the most of our unequalled opportunities. No other country has equalled ours in its liberality to railway promoters; but we show a reluctance to aid in canal projects that is hard to understand. We point with reasonable pride to the St. Lawrence route, but we cannot afford to become so lost in admiration of what has already been done, as to forget that, after all, we have really only made a beginning.

That eminent railway magnate, James J. Hill, than whom there is no more competent authority on transportation problems, has stated that the secret of low freight rates lies in canal development. This emphasizes the statement of Mr. Pullen, whose official position with one of our great trunk lines entitles him to speak with authority, to the effect that railway freight rates are figured out under the menace of water charges, when there is an alternate water route, with the result that railway rates are, to use his words, "kept down to the lowest possible figure." With this fact before us, can we longer question the wisdom of a liberal policy of canal development? For over half a century there has been a canal project before the people of Canada, which, if carried into effect, would shorten the distance between Chicago and Liverpool in the neighborhood of one thousand miles. Some of the most eminent engineers have examined this project carefully and pronounced it sound and feasible, yet nothing has been done in the way of undertaking the work. During this period thousands of miles of government aided railways have been constructed, all of which were needed, and possibly furnished a reasonable excuse for our neglect of other national transportation projects. The time has now arrived, however, when we can afford to call a halt in further railway development on the magnificent scale to which we have become accustomed, and turn our attention to the development of water routes. The people of this country have been generous to the railways, and they owe us a lot in return for what we have done for them. They could have no grievance if we now let them shift for themselves, and turned our attention and our money to the development of water routes which will be the property of the nation and its best guarantee of fair and reasonable treatment in the matter of transportation charges.

THE PULPWOOD QUESTION.

AS expected, President Roosevelt in his message to Congress declared in favor of the abolition of the tariff on forest products. He went further, however, and suggested that the repeal of the duties on wood pulp should be accompanied by an agreement with Canada that there shall be no export duty on Canadian pulpwood. This is characteristically American; but Canada has grown too wise to allow her resources to be exploited for the benefit of her neighbors. There was a time when some of our statesmen thought that the prosperity of this country was so dependent upon the favor of our big neighbor to the South, that they were willing to grant all manner of concessions to them. But happily that day has passed, and now, instead of a suppliant, the United States will find Canada grown into a self-reliant competitor, fully alive to the advantages she possesses, and determined to maintain them in the interests of her own people exclusively.

In few other products has Canada such advantages as in forest resources. The United States, on the other hand, are practically at the end of theirs. The cry of distress has already gone up from their paper mills and paper users, and it is in answer to that cry that the President has spoken.

No one in this country has been deceived by his declaration into believing that Canada is about to receive some special trade favor from her big neighbor. Instead of the rejoicing there once might have been in this country over an incident of this kind, there is to-day a feeling of suspicion, born of an experience which has taught us to be cautious in all our dealings with our friends at Washington. They have earned a reputation as adepts in the fine art of trading the shadow for the substance, but Canada has been too close a student of their methods to be caught by them at this late day.

Put in the plainest possible language the situation is this: There is an enormous and ever increasing demand for paper in the United States, and there are hundreds of paper mills equipped to supply the demand, but the raw material to keep the mills going has become practically exhausted, and the day is near at hand when they will have to be closed down if the shortage is not supplied from some other source. In Canada the consumption of paper is limited and the mills are comparatively few, but her supply of raw material is enormous.

The publishers of the United States have gone to the President and told him that they must have paper, and the paper-makers have gone to the President and told him that they can supply all the paper required, but they must have pulpwood, and now the President turns to Canada and says: "Give us all the pulpwood we require and we will allow you to sell us wood pulp without asking you to pay us anything for the privilege."

Such is the situation as it exists to-day, and it shows clearly that the advantage is all with us. The commodity that the American market demands is paper, and if Canada stands firm at this stage, and refuses to let anything but paper go out of the country, our American friends will be compelled to take it from us. The President, in his message, talks of an agreement with us and indicates the terms on which he would be willing to negotiate. He ignores, for he cannot fail to realize, the fact that Canada is in a position on this question where she does not have to enter into any agreement or negotiate with anybody. She can dictate the terms in full herself, and they do not need to be lengthy or involved. The only reply she needs to make to the President and his friends is: "Gentlemen, we have neither pulpwood nor wood pulp for sale, but we can supply you with paper in any quantities that you may require." That is all. The orders will come, and instead of our pulpwood bringing us a gross return of $7.00 a cord in the raw, it will bring us $40.00 as a finished product.

THE FOREIGN EMPLOYMENT AGENCY.

A GREAT deal of injury is being done to Canada by the employment agencies in the Old Country that misrepresent facts and mislead unfortunate workingmen with false promises of immediate and steady employment in this country. To-day there are hundreds of men walking the streets of our cities in search of work, who are the victims of these unscrupulous foreign agencies. At a time like the present, when employment is not over-abundant, our own people are able to fill all the positions offering, and they are entitled to the first call on them. That the labor market is allowed to be flooded with strangers who compete for every opening, is an injustice to our own working people of which they have every reason to complain. The remedy that at once suggests itself is the prosecution of the rascals who act under the guise of employment or immigration agents, but are nothing more nor less than common swindlers.

The officials of the Canadian Government in England and elsewhere abroad confine their energies to the sending out of settlers, farm laborers, and domestic servants, too many of which classes it is scarcely possible for us to get. Mechanics and skilled laborers get neither encouragement nor advice from the accredited representatives of the Canadian Government, and are, therefore, left entirely at the mercy of the swindling agencies that rob them in the most shameful manner. Many of them are waxing wealthy on the head-money they collect from their victims, and as their revenues increase their methods become more daring and dangerous.

A case that was brought to the notice of the Canadian Manufacturers' Association, and was by them investigated in the interests of Canadian workingmen, illustrates how the swindle is carried on. In this particular instance a member of the Association reported that some twenty men from an English manufacturing town had called at his factory in Toronto and announced that they were the men sent out to fill the vacancies existing in the establishment. As there were no vacancies on the staff, and no one had been requested to send men out, they were naturally asked to explain how they came to get such an idea and from whom. In reply they produced an advertisement asking for twenty men skilled in their line to go to Toronto to fill vacancies. They had replied to the advertisement, and were sent on to Toronto. Further investigation disclosed the fact that the firm in question had purchased some new machinery in England which would give employment to a gang of twenty men. The transportation company that brought the machinery over jumped at the conclusion that there would be twenty new places in the factory to which it was delivered, and they passed the news along to an agent who advertised for the men. The agent got a good commission, the transportation company got the fares and the men got swindled. There is no other word with which to describe a transaction of this kind. The affair was reported by the Association to the proper authorities in order that some action might be taken to prevent the labor market of Canada becoming overcrowded with men brought in under similar circumstances.

While in this case there was at least a shadow of an excuse for the action taken by the agency, there are hundreds of other cases where there is no excuse at all. Lying advertisements are inserted in the press, and when victims go to enquire as many more lies are added as may be required to induce the applicant to part with his money. It is a cruel, heartless business, and those who engage in it should not be shown any consideration when detected.

The attitude of Canadian officials in European countries in withholding all information from intending immigrants of this class makes the work of the fake agency comparatively easy. If instead of refusing them advice our officials over there were kept posted on the labor situation in Canada, and instructed to tell the actual truth to all applicants, we would at least be relieved of responsibility in the matter. As it is the country gets the blame for every swindle of this kind that is perpetrated in Europe, and while it maintains its present policy of non-interference it is not wholly to be excused.

The labor unions are also to blame, inasmuch as they are responsible for the attitude of the government. There

are times when Canadian industries are seriously hampered through lack of sufficient skilled labor, and the unions fear that the government would, at such times, assist in relieving the shortage by announcing the facts. This is a foolish stand to take, for the manufacturers are well able to advertise for help themselves, whereas the unions are not in a position to prevent the unscrupulous agencies sending in men at all times to glut the labor market in lines that are already fully supplied. The working people of the country have everything to gain by the truth being made known through official sources, for they are the only ones in this country who suffer through the existing state of affairs.

A discussion on this subject was raised in the House of Commons, before the holidays, by the Leader of the Opposition, and the Minister of the Interior made an amazing statement in his reply. Mr. Borden read a copy of a circular sent to him by a man who was then in Toronto out of work. The author of the circular stated that he was in a position to find immediate employment, as weavers, for immigrants landing in Toronto, at wages of from $17 to $20 per week. The circular further stated that the Grand Trunk Railway had notified the agent to procure the weavers. Mr. Borden said he did not believe the Grand Trunk had ever given any such direction as that stated. Mr. Oliver, in reply, said that the individual responsible for the circular was not an agent of the Government, so far as they were aware. He rather fancied from the nature of the advertisement that he was an agent of the Canadian Manufacturers' Association, with which the Government had had some correspondence.

This is an amazing statement for a responsible Minister to make, and the more so as the impression sought to be conveyed to the public is utterly false. A man in the responsible position of the Minister of the Interior has no right to have "fancies," and having them, he should be careful not to utter them to the injury of anyone, much less of a body of men whose honesty and integrity and reputation for square dealing is the foundation on which the country has to build its commercial future. Had he taken the trouble to enquire into this particular case he would have found that the circular in question was the very one that the Canadian Manufacturers' Association had traced to its source and reported to the Labor Department. The Canadian manufacturers are not in the business of luring British artisans away from their employment at home and bringing them out to Canada to be turned adrift on the streets of our cities. Any men the manufacturers have brought or may bring out are men urgently required for the operation of their plants. The others are the victims of the swindlers whose operations are made possible by the attitude of non-interference maintained by the Canadian Government at the dictation of the labor unions. Unfounded insinuations against the Canadian Manufacturers' Association do not furnish an excuse for maintaining a policy which makes it possible for unscrupulous individuals to prey upon the ignorance of the British artisans. It is surely bad enough to allow labor conditions in Canada to be misrepresented abroad, without trying to make the Canadian manufacturers responsible for the acts of every swindler whose way is made easy by the indifference of the Canadian authorities. Such an attempt might be expected from an irresponsible labor agitator, but it comes with a bad grace from a responsible Cabinet Minister.

PURE FOOD LAWS.

IN January a meeting of the manufacturers of food products of every description will be held in the Association offices, Toronto, to discuss the advisability of urging on the Dominion Government the appointment of a Pure Food Commission. By thus bringing all the manufacturers interested together it is hoped that the suggestion first broached at the meeting of the Grocers' Section held in Toronto during the Annual Convention in September last, will be crystallized into a definite proposal which can be placed before the proper authorities with the approval of all the manufacturers concerned. In suggesting the creation of a Pure Food Commission the manufacturing grocers aimed at accomplishing some measure of reform in the manufacture of food products, which all are agreed is highly desirable. While the abuses which have crept into the Canadian food production business are not nearly so numerous nor so dangerous as those which were found among United States firms prior to the adoption of the present Pure Food Law in that country on January 1st, 1907, there is no doubt that there are some evil practices existing in Canada which will require concerted action on the part of the trade, backed up by a vigorous administration of a good law on the part of the Government, to eradicate. There are many signs which indicate that the Department of Inland Revenue will shortly introduce pure food legislation in Canada. The manufacturers quite approve of this action, but before any bill is introduced they are strongly convinced of the necessity of a thorough investigation into the conditions of manufacture in Canada, so that the requirements in any regulations that may be proposed will not be too drastic nor far-reaching, as it has been stated the requirements of the United States law are.

These are the reasons which prompted the grocers to suggest the appointment of a Commission. Whether all food manufacturers favor such a scheme will have to be determined at the meeting to be held shortly. In any case a plan must be devised which will enable the manufacturers and the Government officials to exchange ideas freely. It is altogether likely that the two parties can work closely in touch with each other to the advantage of consumer, producer and administrator alike, if the matter is proceeded with in the right manner. It is with this in view that the meeting will be called, and it is hoped that every manufacturer will arrange to be present so that an organization can be effected which will investigate, confer and labor with the department officials, on the Pure Food Commission if one is appointed, until a law satisfactory to the majority is passed. The manufacturers of Canada stand for purity and publicity in their own interests and those of the consumers, and earnestly desire to see a good pure food measure put on the statute books. It is only by concerted action and a reasonable attitude with regard to pure food measures that they can place themselves right with the public and the Government, and so avoid the trouble which the United States food manufacturers have fallen into. Let every firm be represented when the meeting is called to order in January.

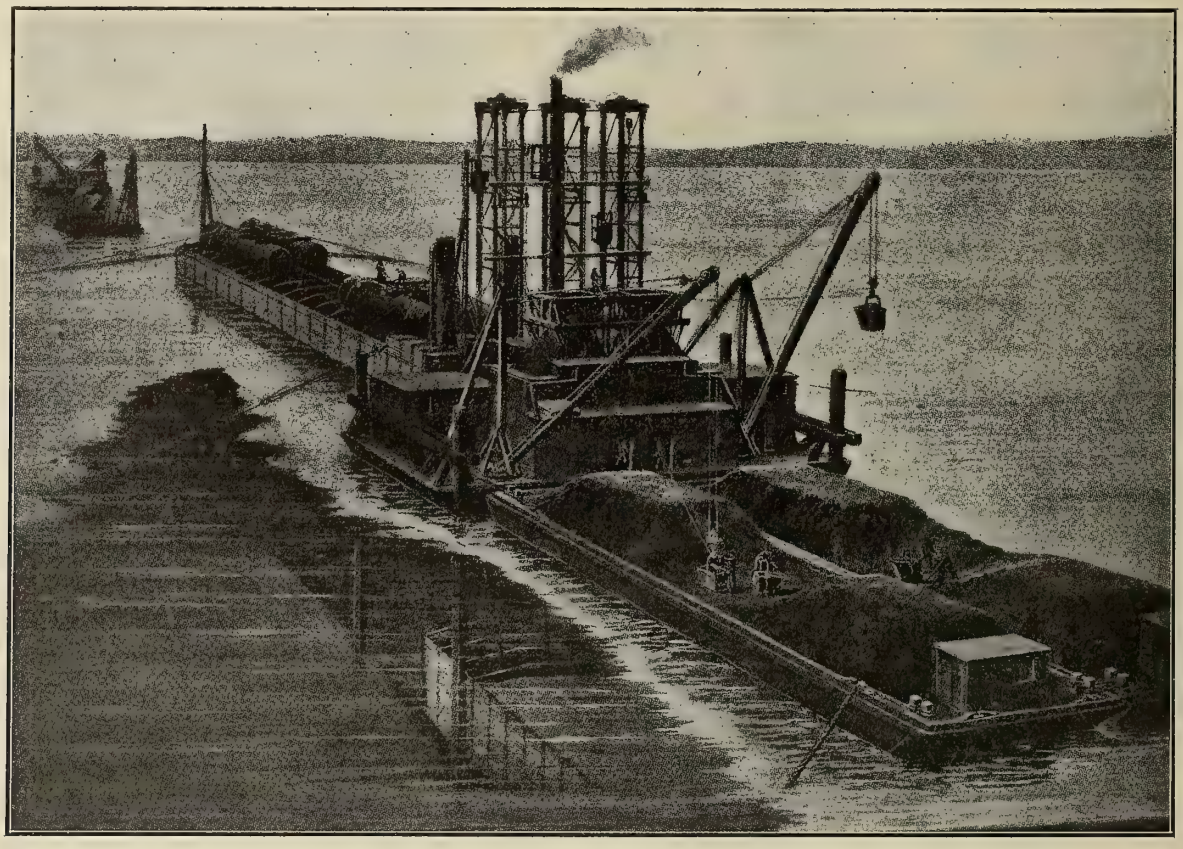
The Canadian Government will discontinue the subsidy to the Union Steamship Line, which maintains the present service between Vancouver and Australia, when the present contract expires on August 1st next. This is the result of the recent tariff enactments in Australia which have shown that the Australian Government are not ready to make concessions in favor of Canada. It is felt that the Canadian advances for reciprocal concessions have not been received in a spirit which would justify Canada in going to any further expenditure to develop a direct trade. Should conditions improve before the date of the expiry of the present agreement, it is possible that the subsidy may be continued.

Joining Two Countries by a Tunnel

Trains Will Run Between Windsor and Detroit Through Twin Tubes Under the River

IN a very little while, measured by the swift flight of time in this era of rapid solution of transportation problems, the huge railway car ferries on the Detroit River will have passed from the traffic life of the busy stream. For many years these powerful steamers have transported the enormous freight tonnage and millions of travelers across the border between the two countries. The five trunk lines—the Michigan Central, the Grand Trunk System, the Wabash, the Pere Marquette, and the Canadian Pacific—operate no less than ten of these car floats.

When the Detroit River tunnel, one of the most important railway enterprises of the present time, is completed, the tunnel, over the slow and uncertain ferry system, is deemed by the Michigan Central officials, in view of the ever-increasing tonnage of the road, of sufficient moment for the expenditure of $10,000,000 in the construction of the International tunnelway. About three years ago the project was taken up by Mr. Henry B. Ledyard, then president of the Central, and through his untiring efforts the board of directors authorized the construction of the tunnel, and also the organization of the advisory board of engineers to carry out the great undertaking. The advisory board was appointed in June, 1905, and was composed of W. J. Wilgus, then chief engineer of the New York Central and in charge of the electrification of the



Scows and Dredging Apparatus

through "limited" and express trains and the long heavy freights of all the trunk lines will pass below the bed of the river, and rise to the surface of another country in six to seven minutes. By the present system, about thirty minutes is lost in ferrying and switching each express train, and from four to seven hours in handling through freights; while perishables, which are given the preference over all other classes in quick ferriage, do not get under way again within three hours. In winter, when the ice floes, brought down from Lake St. Clair by the swift current, often jam the river from bank to bank, the big steamers frequently become fast in the stream; and the delay from this cause to fast passenger service between the East and the West sometimes amounts to from three to twelve hours.

What Must Be Saved.

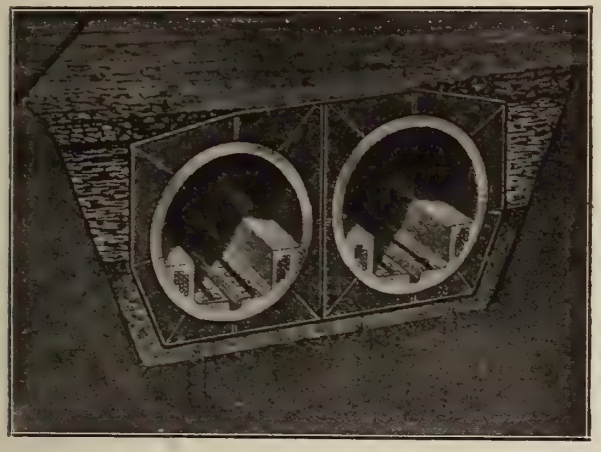
The saving in time and expense of operation in moving the heavy traffic across the river through a double-tracked New York City terminals; H. A. Carson, consulting engineer, who designed and built practically all of the Boston subways; and W. S. Kinnear, chief engineer of the tunnel in charge of construction.

Trenches Along Bed of River.

Instead of digging parallel bores through the tough blue clay far below the bed of the river, by means of shields driven by hydraulic rams, a great trench has been dredged out of the bottom of the river, in which are being sunk successive tubes of steel, 23 feet in diameter and 260 feet long, secured together by transverse stiffening diaphragms of steel at every eleven feet of their length. These tubes form the water-proofing of the tunnel proper, which consists of a solid ring of concrete, two feet in thickness, formed within the tubes. The width of the river between dock lines is about half a mile, and the subaqueous section of the tunnel, or part entirely under the river, will consist of ten of these

twin tubes with a total length of 2,622 feet. Along the bottom of the trench, rows of piles have been driven and capped, to form a bearing for the tubes.

The tubes are built at the shipyard of the Great Lakes Engineering Company at St. Clair, forty-eight miles away. The ends of the tubes are "plugged" with stout wood bulkheads, to render them watertight. Then they are launched into the river sideways, very much as lake ships are launched. Floating lightly on the water, and drawing no more than six feet, the tubes are towed by a tug down the river to the place where they are to be sunk. On top of the tubes and near each end are two air cylinders, ten feet in diameter and sixty feet long, strapped securely to the tube diaphragms, and these serve to regulate the settling of the tubes, as they slowly fill with water, which is admitted at the will of the engineers through gate valves in the bulkheads. There is also provided at each end a detachable upright, firmly braced to the section and of sufficient length to indicate the position of the tubes when they have been entirely submerged. These uprights also show the engineers the exact position of the tubes when they are resting on the piling, eighty feet below the surface of the river, and act in adjusting them in their position laterally, so as to bring the sections into alignment. The uprights extend about ten feet above the water when the section is in place. After all is prepared and proper



Miniature View of Twin Tubes as They Will Appear

precautions have been taken to check the least deviating movement, the gate valves are opened, and the tubes slowly settle into position.

Made Absolutely Watertight.

Each tube as constructed in the shipyard is provided at one end with a sleeve, which is slipped over the end of the adjoining tube already sunk and in position. The sleeve is fitted with a flange, which is bolted to a corresponding flange of the other tube, a rubber gasket being placed between the two. A similar gasket is slipped in at the inner end of the sleeve, bearing up against the edge of the other tube. When the bolts are in place and all is ready, divers turn up the nuts, thus squeezing the rubber gaskets together between the ends of the tubes to form a tight joint. An annular space of three inches by eighteen inches is thus formed all around the tube at the joint, which is then filled with a grout of pure cement. To this end each sleeve is provided on the top with two small pipes, flexible at the joints and leading up to the cement scow floating above. The water in the space is then pumped out, and if the least leak occurs in the main joint, there is more work for the divers in bolting up. When the joint is absolutely watertight, pure cement is pumped into the space through one pipe and continued until it comes out through the other, which is evidence that the space is completely filled.

The water in the tubes is now pumped out and the inner bulkheads removed, leaving the space clear and dry to the outer bulkheads. Concrete gangs now come on the scene, and, pushing their big half circular wood forms along into the new tubes, proceed to build up the tunnel itself, which is of solid concrete varying in thickness from two to five feet. The concrete tube is calculated to be of sufficient strength to withstand all strains and vibrations of the heaviest trains, the steel tubes serving as waterproofing protection, while the outer covering of concrete in turn is the steel tube preservative. On each side of the lower section of the tubes there are benches of concrete four feet high and two and a half feet wide at the top, to serve as passageways and places of refuge for the trackmen. When the concreting is completed there is a clear head room of eighteen feet from the tops of the rails to the centre of the arch.

Applying the Cement.

Out in the stream are the cement scows, fitted out with the latest concrete mixers and with huge cranes and other devices for the rapid handling of the material from the lighters alongside. The scows are anchored as immobile as is possible in the swift current of the river, which is constantly churned into choppy waves by hundreds of passing freighters and excursion and ferryboats plying the busy stream. By means of hoppers placed at the top of long vertical delivery pipes, the concrete, as it is prepared, is deposited in the trench exactly where it is needed, and comes in contact with the water only when it is spread over the surface of the gravel bed which was prepared for it. As the work goes on, the concrete is held in proper form about the tubes by three-inch oak planking, firmly braced and backed up with clay and river slime from the dredges, working in the trench farther out in the river. Concrete is also chuted down between the tubes and continued up over them for five feet, thus encompassing them in a solid monolithic mass. The trench is then filled around the tunnel, and the top is covered with riprap.

The construction of the approach tunnels is proceeding on lines well established by the best engineering practice; and this part of the undertaking is a huge task of itself. Two shafts were first sunk at the river banks, one on each side, and from these excavating for the centre wall was carried on inland as far as other shafts, and from them to the portals. Concrete gangs followed, building up the centre wall, and when this was completed, the bores were pushed forward by a modification of the shield methods of the New York tunnel work, the change being necessary because of the tough clay of the under stratum. The shafts near the river will be permanent, and they are lined with double walls of concrete. They will serve to ventilate the tunnel, and as trains move in each tube only in one direction, a constant circulation of air will be maintained.

Electric Motive Power.

Electricity will be the motive power used in hauling trains through the tunnel, and current from the power plant of a local concern has been arranged for. Only a small transforming station will be needed to convert the alternating current, commercially supplied, to direct current for the locomotive motors. For the operation of the tunnel eight powerful electric locomotives are being constructed. It will be brilliantly lighted with electric lamps, and the walls will be clean and bright, for there will be none of the gas and soot that fill tunnels operated by steam locomotives. A system of block signals will be installed, and so arranged that no train or locomotive will enter either tube until the train ahead of it has passed beyond the summit on the other side. —*Scientific American.*

On What Basis of Value Shall Insurance Companies Pay for Burned Lumber

THERE is one class of lumber risks which, it is contended, has come in for peculiarly harsh treatment in the adjustment of losses. From time immemorial the manufacturer of lumber—the man who cuts up the log—has been confronted with the principle that in the adjustment of a fire loss the insurance companies will pay only such an amount as it has cost to produce the lumber burned.

It has been held by the insurance companies that "cost of production" is the proper basis of settlement. Here and there an aggressive lumberman has carried the opposite end of the argument to the courts and we have a number of decisions confirming the contention that losses must be settled on the basis of "market value" and that the cost of production may be ignored as a factor in determining the value of the property destroyed.

Before looking into the merits of the question it might be well to define clearly the exact conditions under which lumber losses are subject to this particular ground for disagreement. In the settlement of a retail lumber yard loss, there is no room for such a contention, for here the value of the lumber is clearly determined by the evidence in the retailer's books as to the price he has paid for the lumber burned. Almost invariably the lumber has been bought from a wholesaler at a definite price per thousand feet for each kind and grade. In like manner the value of lumber on a wholesale yard can usually be readily ascertained, the wholesaler having as a rule bought the lumber from some manufacturer at a definite and easily proved price per thousand.

Where the Manufacturer Suffers.

In the case of the manufacturer, however, there is no definite price paid. He is the man who owns timberland, builds logging railroads, fells trees and saws in his own mill the logs, producing rough and sometimes dressed lumber which he stacks on a yard to dry. Here there is infinite room for dispute as to the value of the lumber, and such disputes frequently arise when assured and adjuster undertake to determine how much shall be paid for such lumber when burned. It has been a favorite method of procedure for adjusters to demand that the assured establish the cost of production, and in more cases than might be supposed this method of arriving at the value per thousand has been accepted. To the practical lumberman it is not necessary to point out the numerous points at which disagreement might arise as to what enters into the cost of production. It would be most difficult to devise a formula for arriving at the value applicable to all cases. Superficially it might be said that the cost of production can be determined by adding to the cost per thousand of the standing timber, the cost per thousand of logging, milling and stacking on yard. But how can the exact cost per thousand of the standing timber be determined until the entire tract has been cut? How about interest on the original investment earned in the period, often one of many years, between the date of purchase of the timber and the date of the burning of the finished lumber? How about the time of office employees, and the travelling expenses and salaries of inspectors, the advertising expense, and the owners time in superintending the entire operation? All of these are obviously legitimate factors in producing the lumber ready for a market.

Foresight Must Be Recognised.

In view of all of these and many other points of difference of opinion, it is little wonder that there is a growing insistance that this is getting at the value wrong end to. It is asserted by lumbermen that there is a sufficiently broad and well established market for lumber, to make it possible to readily determine the value of a manufacturer's product on the basis of the market value. Between the cost of production and market value lies the manufacturer's profit. The adjusters have unanimously contended that a policy of insurance is an instrument of indemnity which contemplates no reimbursement for profit. They are ready to pay only "cost of production." The courts have never sustained this contention, and in more than one instance have held the opposite. The adjusters have never made it clear just what they regard as "profit." Whether the time and effort and energy and foresight of the manufacturer himself shall be taken into consideration as an element in the cost of production, or whether the manufacturer must see all of his own personal contribution to the production of his lumber sacrificed in the flames on the altar of "profit" is a point on which the adjusters do not commit themselves. A lumberman who by foresight and shrewdness has acquired timberland at two dollars an acre and who can consequently produce lumber at a cost many dollars less per thousand than the man who has later bought similar timberland at twenty dollars per acre, must see the fruits of his own sagacity wiped out in the event of the burning of his accumulated stock of lumber followed by an adjustment on the "cost of production" basis. An adjustment on the "market value" basis would on the contrary reward the two dollar an acre man for his foresight by paying him the same price per thousand as would be awarded the twenty dollar per acre man.

A Pertinent Parallel.

A parallel might be drawn between the settlement of lumber losses and grain losses.

It has never been contended that burned grain should be paid for on any other basis than market value. Yet there is just as much diversity in the cost of production of grain as in the cost of production of lumber. Would the adjuster who is ready enough to ask a lumberman to show the cost of timber, logging and milling, ask a farmer to show the cost of tilling, seed, harvesting and threshing, as a basis of value for grain? Perhaps the difference lies in the fact that the poor farmer might too often show that it has cost more to produce his grain than he can get for it, while the rich lumberman as a rule has a wide and easily get-at-able margin of profit. Another question for the adjusters to answer is what attitude would they take should the market price of lumber fall below the cost of production? Would they then fly for cover to the "market value" basis of adjustment?

There is every reason to believe that with the awakening of manufacturers to the fact that the cost of production method is unsound and has no legal recognition, there will be a passing of that manner of adjustment fraught with many fallacies and uncertainties of result as it is, and there will in due time be universally adopted the simpler and fairer method of adjustment which has as its foundation the market value. Nothing seems simpler in determining the value of the burned lumber than to start with the market value f.o.b. cars at the place of fire and deduct therefrom only the cost of loading and cost of selling—the expense of

which the assured is relieved of by reason of the lumber being destroyed.

The Moral.

We are glad to quote this article *in extenso* because it emphasizes the point of view of certain specializing lumber insurance companies on the important question of cost versus market value. The bone of contention between insurance companies or their adjusters and the saw millers on this subject, after a loss has occurred, has in the past caused much bickering, disputation and procrastination in the settlement of fire losses, and in not a few cases that have come under observation have the millers accepted a settlement on the "cost basis" at considerable and unnecessary financial loss.

Owing to the difficulties thus experienced it has become a fairly general rule to have fire insurance policies so written that there can be no possible question as to the basis upon which the adjustment will be made, and the obvious lesson to those millers who have not followed this course is that the time to put their policies in order is before rather than after a fire has happened.

WOULD CURTAIL EXPORTATION OF GAS.

A SERIOUS shortage of natural gas for domestic use in the Niagara Peninsula is again threatened, similar to that which adversely affected certain sections last winter. During the winter of 1906-1907 St. Catharines and Thorold suffered severely through the insufficient supply, although at the same time a great quantity was being piped daily to Buffalo. The same conditions obtain this year, and to anticipate the trouble the City Council of St. Catharines have decided to urge the Minister of the Interior to take such steps as he may deem necessary, to restrict the exportation. The following statement of the case is appended to the Council's resolution:

"The Provincial Natural Gas Company of Ontario, of which capital stock 51 per cent. is held by a foreign corporation, the Buffalo Gas Company, made a contract some years ago with the latter company, to deliver all its natural gas to the Buffalo company at 12½c. per thousand, at the Niagara River, and it has eight (8) main lines lying in the bed of the river, conveying said gas to Buffalo for distribution in a foreign country.

"These pipes are laid under the river by leave of the Provincial Government, and could be removed at any time, as the license to maintain and keep them there is revocable at will of the Lieutenant-Governor-in-Council.

"Attempts have been made to induce the Provincial Government to prevent the use of the river bed for carrying gas out of the country, but that Government has always declined to interfere.

"On the 27th of April, 1907, an Act was passed 6 and 7 Edward VII. Chap. 16, by the House of Commons, entitled 'The Electricity and Fluid Exportation Act.'

"By that Act fluid is defined to mean, petroleum, natural gas, etc.

"By Sec. 3 of said Act, no person shall export any power or fluid without a license.

"By Sec. 4 subject to any regulations of the Government in Council, licenses may be granted under such conditions as is thought proper for the exportation of power or fluid.

"By Sec. 5. Any such license may provide that the quantity of power or fluid, shall be limited to the surplus after the licensee has supplied for distribution to customers for use in Canada, power or fluid to the extent defined by such license and every such license shall be revocable at will by the Governor-in-Council.

"Invoking the aid of this Act, the United Gas Company of St. Catharines in the month of October last lodged with the Governor-in-Council a protest against the Provincial Natural Gas Company sending natural gas to Buffalo until they had made fair arrangements with the St. Catharines Company to supply it with gas at a reasonable price for local consumption.

"The Provincial Company has wells surrounding those of the St. Catharines company, and the pull on the gas going to Buffalo has been so severe that the St. Catharines Gas Company's wells are almost depleted, that is to say, they are not able to stand the drain of the consumers on the United Gas Company's lines.

"Representations were made to this effect to the Governor-in-Council, and the matter was sent to the Department of the Interior, with the result that the department's chief engineer, Mr. Higman, was sent here to investigate the subject, and he has it now under consideration.

"It is learned that the Provincial Company are opposing the application, contending that they are not obliged to supply any consumers through the pipe line of a rival company. It is to be noted, however, that the Provincial Company makes no effort whatever to serve the field covered by the rival company through lines of its own, preferring to sell the whole or the greater part of its supply in Buffalo.

"The St. Catharines Company is prepared to pay the Provincial Company as much, at any rate, for any gas it should get from them, as they are getting from the foreign corporation.

"The pipe lines of the two systems are contiguous and a connection could and should be made forthwith.

"This same connection has been established for years in Welland and Port Colborne. The Mutual Company operating in Welland and Port Colborne supplies these two points, paying 15 cents per 1,000 for as much gas as they take from the Provincial company.

"The United Gas Company of St. Catharines desires the same privilege and the Provincial Company should be obliged to conform thereto, failing which, its export license should be revoked."

WILL INSTRUCT FOREIGNERS.

The Hamilton Board of Education have assumed the responsibility of a cosmopolitan population by deciding to open a night school for teaching foreigners the English language. This is as necessary as it is far-sighted. Assimilation of foreigners by native Canadians can never be accomplished until the foreigner becomes familiar with our language. That is the first essential to bringing about a community of sympathies and interests. It is frequently stated, and the statement has been corroborated, that in one district of Toronto the majority of the women are unable to speak English. The younger generations are acquiring the language, but in their homes their native tongue is alone heard, and their sentiments, ideas of citizenship and conceptions of public duty, are uninfluenced by the press or by those who have been reared under existing conditions. Yet cities which have appreciated the import[illegible] of this problem and have provided facilities in the evening for instruction, have found the new-comers willing and eager to learn the language of their adopted country, and to become thereby a part of the community in which they live.

Shippers and the Railways

Problems of the Month

AN UNWISE SUGGESTION.

AN unwise suggestion was made by Mr. E. N. Lewis, M.P., in a speech before Parliament recently, when he advocated a separate railway commission for the West, on the assumption that the problems confronting Eastern and Western Canada are entirely different. Nothing could be more ill-advised than such a course. What shippers in every part of the country are most interested in is to get away from any division of authority. Those who have had to do with freight questions involving import and internal rates to Western points know how delicate is the matter, and how essential it is to strike a fair balance between the claims of all parties interested. So many questions of competition and distribution enter into the consideration of a freight rate that a commission would be worse than useless which, acting in the interests only of a section of the country, in its investigations and deliberations failed to take into account conditions in other parts of the country which had a bearing on the matter. Certain rates, while they were of advantage to the West, might be of such a discriminating nature as to seriously handicap shippers in the East. A Western Railway Commission would not necessarily see anything wrong in this condition. They would be appointed to protect Western consumers and shippers, and the injustice done to Canadian industries by such a condition would not in any way fall under their purview. Yet if a railway commission stands for anything, it stands for an equitable basis of rates for all Canada, by which neither shipper, consumer, nor carrier can be exploited to the special advantage of any one interest or section.

The wise man is he who profits by experience, and if the experience is bought and paid for by someone else, so much the better. Many of the states of the neighboring Republic have railway commissions in addition to the Federal body, the Interstate Commerce Commission. These commissions have jurisdiction in all cases where traffic originates and terminates within the state's borders. How this works out can be seen from the case of the Rock-Island-Frisco System, a combination of lines with a total mileage of about 15,000 miles, operating in fifteen states. Of these thirteen have railway commissions. Their decisions vary from time to time, and the state laws governing transportation are different. Hence complications are constantly arising. Equipment or facilities which are necessary by the law of one state are frequently unnecessary in another. Thus the company has to deal with almost as many commissions as there are states through which it passes. In Texas sleeping car companies must furnish sheets nine feet long and six feet wide on the berths. A train which was more than one hour late had to be annulled and held till the scheduled time next day. The latter law has, it is true, been declared ultra vires by the Interstate Commerce Commission. These regulations enforced by one commission, will serve to show what innumerable anomalies and interminable delays would be caused by a multiplicity of bodies of this kind; yet the appointment of a separate commission for Western Canada would bring about a similar condition here, and would be the entering wedge to the appointment of commissions for each province.

Shippers, consumers and traffic managers are alike satisfied that the best results will be attained by sticking to the present system of having one federal body which shall pass on all transportation disputes. Changes should come by increasing the number of members and sub-dividing the work among them, but in every case having the decrees emanate from the commission as a whole. In this way individual commissioners could go to the West or the East, and could take evidence on any question which arose and report their findings to the commission. In the larger questions the full board would sit; but on the whole better and more expeditious results would be attained by apportioning the work and by letting one man give especial attention to a particular line of investigation.

We feel sure that this and not Mr. Lewis' method is the one which will bring the best results.

INTERSTATE COMMERCE COMMISSION.

A bill has been introduced at Washington which is the result of conferences with many men prominent in the railway and shipping business, to provide for a division of the executive and quasi-judicial and legislative functions of the Interstate Commerce Commission.

It is not intended to add to or substract from the powers of the commission. Its sole purpose is to divide the functions and vest the executive ones in a bureau to be created in the Department of Commerce and Labor.

It is proposed to obviate the difficulty which makes it impossible for that body to perform satisfactorily both the administrative and judicial duties now imposed upon the commission, by transferring the whole task of enforcing the law to a "Commissioner of Transportation," who would have charge of everything pertaining to the filing of tariffs, the enforcement of the safety appliance law, supervising the system of accounting, and enforcing the penalties for violations of the law. The Commission itself would be left free to hear complaints and to pass on the reasonableness of rates.

The inquisitorial functions of the Commission would also fall within the jurisdiction of the "Commissioner of Transportation."

RAILWAYS WOULD PENALIZE SHIPPERS.

THE *Toronto Globe* in a recent news item, entitled "The Railway View," and with the following sub-heads, "Cars now standing idle for want of business. If the roads are to be penalized for lack of cars in rush times, they ask why the business public should not be penalized for not supplying freight in dull times," says:

"With the shrinkage in earnings, which is the first decrease in a long while, the cry of 'reciprocal demurrage' is being interpreted in a new way. Positions are reversed. To-day shippers are not shouting for cars; the railways have the cars, but they are standing idle awaiting orders. Naturally the 'reciprocal' end of the demurrage scheme has been forgotten and the shippers are quite satisfied.

"In view of this the railway men are enquiring just what the word 'reciprocal' means when applied to demurrage. The railways ask why the shippers should not be penalized when the railways have cars ready and idle because there is no business for them. Finally, it is admitted that there is no popular outcry to have the shippers fined for having no freight for the railways."

It must be admitted that the latter is a very charitable position for the railways to take, and will, no doubt, be ap-

preciated by the shipping public, especially as the railways have been so successful in having legislation enacted providing for additional tolls against the shippers for failure to load or unload cars promptly after they have been placed. No one disputes the propriety of such a charge. Shippers have no right to use cars for warehouse purposes, as has been done. Shippers generally favor such regulation; they recognize that in delaying cars in the loading or unloading they are taking from others as well as themselves some of the facilities required in the commerce of the country. The reasonableness of making a just and lawful charge for the storage of property in cars, which the consignee fails to unload promptly, is so manifestly in the interests not only of the carrier, but of its patron, that it is conceded. While granting this point, however, shippers are of the opinion that there should be some reciprocal regulation. Hence the term "reciprocal demurrage." Shippers do not want to be put in a position to demand one dollar per day from the carriers for failure to furnish cars or move them promptly, or place them for unloading as soon as they arrive at destination. What they want are the facilities to do business.

The term "reciprocal demurrage" is a misnomer in every sense of the word. It simply opens up many schemes which, if they were applied in the sense which the term conveys, would defeat the very object in view. What the shipping public wants is legislation to provide for penalties against the carriers for unreasonable detention of property. The railways now have this against the public. Why should the public not have similar protection?

It is the duty of a common carrier to transport property for all who may desire to have property transported. It must furnish adequate and suitable accommodation for the carrying, unloading and delivering of all such traffic, without delay and with due care and diligence, and furnish and use all necessary means for such.

The Railway Act provides for this, and the Railway Commission has the power to require that suitable accommodation be provided. Should a shipper sustain loss through the failure of the carrier to provide proper facilities his only recourse is to the courts. This is, however, an almost impossible task.

As to the question having been forgotten. This is not so. Shippers will not readily forget the experiences to which they have been subjected for the past two years, and the same reason exists for some reciprocal regulation to-day as it did then. Any steps taken in this direction will be continued. In this connection it may be observed that the reciprocal demurrage advocate is looking for service, rather than lower rates. All that he demands regarding rates is that they should be reasonable, uniform and not discriminatory. He probably does not object to an adjustment of rates on a reasonable basis to give the service he demands. In this way he is a friend of the railways and tries to work with them.

The tone of the article referred to leads one to believe that the railways have for so long legislated for themselves that any proposition submitted by the public of a reciprocal nature savors of sacrilege. Up to the time of the creation of the Railway Commission the railways assumed as rights privileges which are now questioned by shippers. This is substantiated in the article in question.

The question of reciprocal demurrage has been before the Railway Commission for some time past. The Board is not sure whether or not it has the power to impose penalties such as are asked for against the railways. It is, therefore, proposed to ask Parliament to give it that power.

As regards the question—Why should not the shippers be penalized when the railways have cars ready and idle because there is no business for them?—might we ask in reply why the railways were not penalized to the extent of hundreds of thousands of dollars, representing only a portion of the loss sustained by shippers during the last three years. Furthermore, have not the railways themselves contributed more or less to the present conditions? Might we not ask why the railways should not be penalized for the indirect loss through cancellation of orders, etc.? It is the custom of the carriers to assess all shippers for idle equipment in their regular rates. Therefore, to say that the shippers should be specially penalized for not supplying freight at times when there is an interruption in the whole commerce of the country would be to say that water carriers should be paid during the five months of the year when navigation is closed. The same applies to the industrial and agricultural interests of the country.

The transportation problem must be solved in its relationship to the interests of the business community, the community recognizing that its obligation and the carrier's obligation are interdependent.

What we ask for is the proper control of railways to the extent of compelling them to perform a service, and in case of their failure in this, to penalize them for it.

EXPRESS RATES UNDER INVESTIGATION.

WAS it necessary for Express Companies to prove that their charges were reasonable, or did the onus of proof rest with the objecting party to prove that any particular charge was unreasonable, was the question which occupied the time of the Railway Commission in its initial sittings on the Express Companies in Montreal during December. The contention of the companies that the section of the Act dealing with their tariffs differed from those referring to railway and telephone companies, was ably advanced by Mr. LaFleur, but after exhaustive discussion the Board ruled that evidence would have to be produced by the Express Companies to establish the reasonableness of their tariffs.

After this question was settled the Board settled down to the real business before it. The representative of the companies stated, that in proving the fairness of the tariffs, he would produce evidence along the following lines:

1. Rapidity of service.
2. Size and quantity of parcels.
3. Distance carried.
4. Space occupied.
5. Value and character of property.
6. Responsibility and risk.
7. Amount of detail work.
8. Extent of collections and delivery work.
9. Value of service to the shipper.

The claim was advanced that the last of these points in a sense embraced all the others and that the true test of the reasonableness of rates was the value of the service to the shipper. While it would be out of place to discuss this point at any length while the investigation before the Board is still unfinished, in ordinary fairness it must be pointed out that when the public is dealing with a practical monopoly, the mere fact that it is accepting the service offered and that it is paying the rates demanded does not indicate the value of the service to the shipper, much less is it a test of the reasonableness of the existing rates.

Considerable evidence was put in explaining the nature of the express business, and elucidating the various tariffs filed. The capitalization, value of property, and results produced in the past, were also brought out during the course

of the cross-examination. This evidence, however, was given in camera at the request of the Express Companies.

The hearing was then adjourned. The investigation will be resumed about the middle of January, when evidence of the reasonableness or unreasonableness of the specific tariffs filed will be heard.

INTERNATIONAL RATE CASE AND READJUSTMENT OF RATES.

THE new freight tariffs in Eastern Canada which the Board of Railway Commissioners on July 6th, 1907, ordered to be prepared and published, and filed by the railway companies, came into effect on January 1, 1908. It is impossible to say now just what the effect of the tariffs will be in so far as the reductions in rates are concerned. It is safe to say, however, from an industrial standpoint, that no legislation has been enacted by the Railway Commission in recent metings, which will be so beneficial in its results. Aside from the reductions in rates which were brought about by the readjustment of rates at the frontier, the Railway Commission required that all special local class tariffs in the territory affected be placed on the same mileage scale. The rates were in all cases to be based on the shortest workable mileage. This involved an enormous amount of work, which could hardly be appreciated by those not immediately connected with the tariff department of the railways.

Now that the work has been practically completed it will no doubt prove a boon to the railway agents as well as the shipping public. Some of the old tariffs have been in effect over fifteen years. Each town had a distinctive tariff on a basis more or less conflicting with the basis in effect from other towns. Some of these tariffs were issued, particularly by the Grand Trunk, when the system was divided into districts with a general freight agent in charge, who had authority to issue tariffs.

In the readjustment, the special local class tariffs are continued, but instead of issuing a separate tariff for each town (as it was required that all rates should read between) one tariff is made to serve a number of distributing centres in the same territory. As an illustration—G.T.R. T. 1, effective January 1, 1908, special and competitive joint freight tariff of class rates, between (then are named forty-three towns throughout Western Canada), and Grand Trunk Railway System stations in Canada (North Bay to Toronto, Hamilton, Niagara Falls, Bridgeburg and west thereof) including Schomberg and Parry Sound.

The tariffs of class rates issued by the Canadian Pacific and Grand Trunk are as follows:

The New Tariffs.

No. E 579.—Between Canadian Pacific stations west and north of Toronto, also stations on the C.W. & L.E., G.P. & H., H.G. & B., N. St. C. & T. and T.H. & B. and stations east of Toronto to and including Montreal and Ottawa and north of Carleton Junction, to and including North Bay.

No. E 582.—Between stations on the Canadian Pacific Railway, west and north of Montreal in Ontario and Quebec, and stations east and south of Montreal in Quebec and New Brunswick.

No. E 583.—Between all stations on the Canadian Pacific, Toronto to Montreal, including the Lindsay, Brockville, Prescott branches, also the Chalk River, Montreal and Ottawa, and North Bay sections to North Bay inclusive.

No. E 585.—Between Canadian Pacific stations, Windsor to Toronto, including the branches.

There are in course of preparation several additional tariffs. E 592 will cover rates between stations west of Toronto to stations on the B. of Q., C.O.R., K. & P., and B.W. & N.W. A similar tariff is being issued to cover rates between stations on the same lines and Canadian Pacific stations east of Toronto.

No. E 593.—This tariff will cover rates from all points on the Canadian Pacific, Eastern lines, to stations on the Wabash in Canada. A similar tariff is also being issued covering rates to stations on the Pere Marquette and Michigan Central, also between stations on the Canadian Pacific west of Toronto and stations on the G.P. & H., H.G. & B,. N. St. C. & T. and T.H. & B.

Grand Trunk Railway System.

No. T 1.—Special and competitive joint freight tariff of class rates between Aurora, Barrie, Berlin, Brantford, Bridgeburg, Chatham, Collingwood, Depot Harbor, Doon, Dundas, Elora, Fergus, Galt, Guelph, Hamilton, Hespeler, Ingersoll, London, Meaford, Merritton, Midland, Newmarket, Niagara Falls, North Bay, Orillia, Owen Sound, Paris, Petrolia, Port Dalhousie, Preston, St. Catharines, St. Mary's, St. Thomas, Sarnia, Stratford, Thorold, Toronto, Waterloo, Welland, Wiarton, Windsor, Wingham, Woodstock, and Grand Trunk Railway stations in Canada (North Bay to Toronto, Hamilton, Niagara Falls, Bridgeburg and west thereof), including Schomberg and Parry Sound, Ont.

No. T 2.—Class rates between Belleville, Bowmanville, Brockville, Cobourg, Cornwall, Deseronto (B. Q. Ry.), Gananoque (T. Ry.), Kingston, Lindsay, Napanee, Orillia, Oshawa, Ottawa, Peterboro, Port Hope, Prescott, Trenton (C. O. Ry.), Toronto, Whitby, and Grand Trunk Railway System Stations in Canada (Toronto, Orillia and east to Dorval), including Ottawa division, east of Scotia Junction to St. Polycarpe.

N. C. 8.—Special joint freight tariff of class rates between Grand Trunk Railway System stations in Canada, Dorval and west, including Gananoque, Deseronto, Trenton, Schomberg and Parry Sound, Ont., and Montreal and Valleyfield, Que., and stations in Canada south and east thereof.

No. C 9.—Special joint freight tariff of class rates between Grand Trunk Railway System stations in Canada, North Bay to Thornhill, Swansea to Hamilton, Niagara Falls, Bridgeburg and stations west thereof (including Schomberg and Parry Sound, Ont.), and stations east of Toronto, Orillia and Scotia Junction to Dorval (including Trenton, Deseronto and Gananoque, Ont.)

It may be observed that G.T.R. No. T 1 now applies where there were formerly some twenty-four tariffs in effect. Through rates are published to and from all points east and south of Montreal including the Maritime Provinces.

All tariffs apply between all points designated in the tariff.

In the preparation of the tariffs, in order to comply with the spirit of the order of the Commission in so far as they apply to the short line mileage, it was found necessary to reduce many of the rates now covered by town tariffs, so that the new issue of tariffs practically means a revision of all freight rates throughout Eastern Canada.

In equipping their new plant at Montreal the Metal Shingle and Siding Co. found it advisable to install a high class tool department which is now in operation. With a view to future expansion the firm have provided a machine shop in advance of their present needs, and they are therefore undertaking considerable outside work, in the making of accurate dies, tools, gauges, special machinery and experimental work.

An Immense Industry Within Our Reach

Mr. W. H. Rowley, of the E. B. Eddy Co., Discusses the Pulp and Paper Question from a Practical Standpoint

IN considering the very important question of prohibiting the export of pulpwood and saw logs, many seem to forget, or not to know, that Canada has the most of the best green trees on earth, and that our magnificent heritage of evergreen, spruce and pine trees provides a crop that only requires careful handling on our part to be a permanent source of incalculable wealth to the country; and that, especially with reference to pulpwood, Canadian spruce makes the strongest, longest, and most fibrous and feathery wood pulp obtainable anywhere, far superior to that of Scandinavia, Russia, Austria, Finland, or to what remains in the United States. Canada has over 2,600,000 square miles (over 1,650,000,000 acres) of green timber, very largely spruce and pine, although there is besides a great deal of hardwood.

The Envy of the United States.

Canada's area of pulpwood is much more the envy of the United States than it is—*as it should be*—the pride of Canada. This is made clear when we realize that out of 70,000 square miles of timber lands under license in the Province of Quebec alone, the Yankees own nearly 15,000; therefore, as 15 is to 70, so is the position of these mercantile marauders to the south of us with respect to Quebec timber lands.

And unless we prohibit exportation of pulpwood from Canada, this ratio will increase year by year. In the last quarter of a century, I have seen it grow from practically nothing to its present alarming proportions, and those who come after me will find it worse for Canada and its paper industry, unless a stop is put to this marauding.

While pulpwood is a raw material of comparatively low value, it produces manufactured articles of high cost.

Millions upon millions of spruce logs, hundreds of thousands of cords of pulpwood, from Quebec, Ontario, Nova Scotia and New Brunswick, go annually to feed the pulp and paper mills of the Eastern, Middle and Western States; Canada gets but little out of this; the government do not get one dollar a cord for the standing wood; the chopper, the loader and the teamster not much more, and the railways only a low rate on coarse freight; so that in all not over $6 to $7 a cord is left in Canada on an average for the hundreds of thousands of cords of pulpwood taken out of our country annually.

What Paper Manufacture Means.

Grind this wood into pulp and watch the disbursements for wages and freight grow; every cord of wood made into pulp will realize about $20; when made into fibre, about $30 to $32; when made into paper, $40 to $45 and upwards. The pulp and paper industry gives more healthy, steady, day and night employment to a larger number of men, women and children, at higher wages, all the year round, than any other industry in Canada.

Establish Mills in Canada.

Has Canada anything to fear from the United States about this? Can they retaliate? Will they? No, they got about all they could stand of that sort of medicine when the Dingley Tariff on eggs aroused the great Canadian hen. President Roosevelt's big stick has no retaliation knobs on it just now with which to whack Canadian wood pulp. The President and the press of the United States urge, let me repeat, *urge*, the repeal of the United States import duty on pulpwood, wood pulp, and white news paper, and are now suggesting, nay, may soon be suing for and begging for an agreement with Canada to try and prevent the Canadian Government from imposing an export duty on pulpwood or from prohibiting the exportation of our wood and logs. But we must not permit our country and its forest products to be further devastated by these marauders; let them come over here and establish pulp and paper mills; just as the Eddys, the Baldwins, the Millens, the Bronsons, the Youngs, the Westons, the Hughsons and others came here and established saw mills. They are welcome to come to Canada. I would like to see Hull "the Holyoke of Canada," just as much as the Prime Minister will be glad to see Ottawa "the



Canada's Forest Wealth Destroyed.

Washington of the North," and in this work will stand shoulder to shoulder with Sir Wilfrid Laurier or any other man who will do these two great things for Canada. Remember what happened throughout the Georgian Bay district when the Ontario Government restricted the export of sawlogs into Michigan, Wisconsin and other Western States. Saw mills sprang up by the dozens, factories started by the score. If all our wood was kept at home to be turned into pulp and paper in Canada, the result in ten years would surprise the most sanguine of us, while the result in twenty years would be almost beyond present imagination and dreams.

In 1888 there were 34 pulp mills in Canada, making 154 tons per day; 40 paper mills, making 173 tons per day; total,

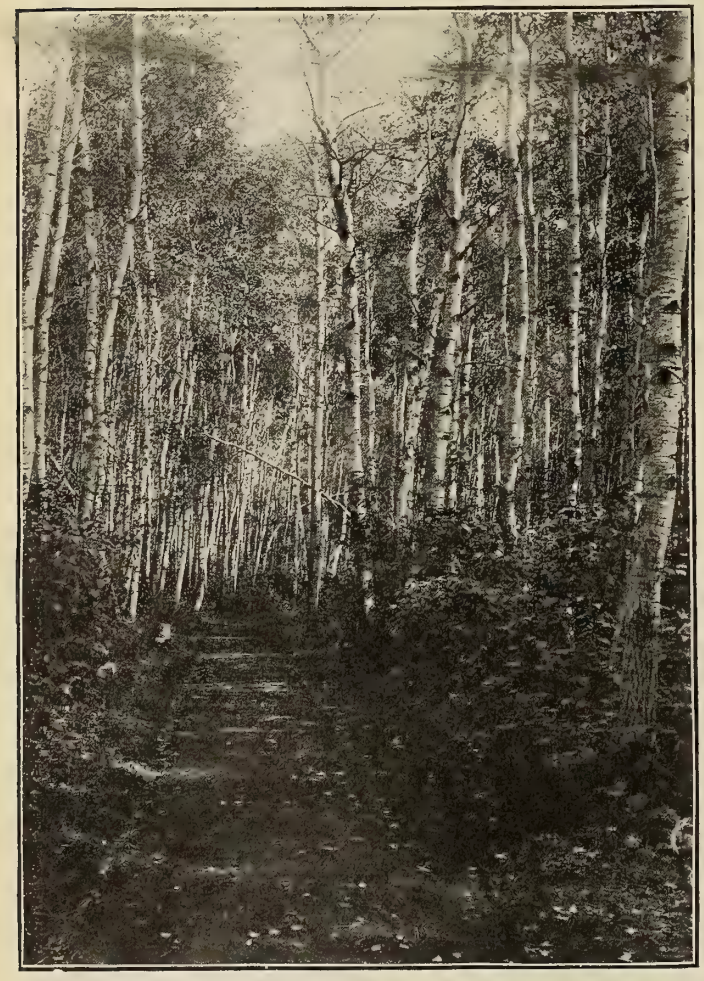
327 tons per day. In 1907 there were 58 pulp mills in Canada, making 2,361 tons per day; 46 paper mills, making 966 tons per day; total 3,327 tons per day. That is, 15 times as many pulp mills and 5½ times as many paper mills in nine years.

The United States View Point.

The leading pulp and paper trade journal of the United States asked the United States pulp and paper makers the other day whether they were in favor of, or opposed to, the recommendation of President Roosevelt to repeal the duty on pulp and paper going into the United States.

Mr. N. W. Jones, manager of the Katahdin Pulp and Paper Co., Lincoln, Maine, says:

"The annual production of pulp in the United States



A Canadian Forest

Nov. 1st, 1906, is: Sulphite, 1,235,832 tons; ground wood, 1,737,216 tons; soda pulp, 327,600 tons; total, 3,300,648 tons.

"While the annual production of pulp in Canada is: Sulphite, 172,224 tons; ground wood, 550,368 tons; soda pulp, 10,920 tons; total, 733,512 tons."

Showing that Canada is producing only about one-fifth as much pulp as is produced in his country.

Mr. Jones also adds that if United States manufacturers were obtaining their entire supply of wood from lands wholly in the United States they would be using up the States territory nearly six times as fast as Canada is using up hers, but fortunately for them, a large proportion of the pulp wood used by them is obtained from Canada, hence they are getting the benefit of our timber, and so on.

Mr. Geo. W. Sissons, President of the Racquette River Paper Co., United States, says: "I am a staunch protectionist from the period of Henry Clay. The Canadian Government and certain Canadian interests are agitating for such legislation there as will reduce the exportation of their pulp wood and compel its manufacture into paper by their own labor in Canada, and then to sell to us the finished product. I believe in protecting our own labor and industries, and am opposed to any present tariff revision, as a general proposition or as a special favor to interests which have it in their own power to protect themselves. The real prosperity of the varied interests of our country in which all classes participate, and never before to such a pronounced or general extent, is the strongest argument against unsettling such conditions through any uncertainty as to the extent of tariff revision if attempted at all."

Other answers are: "Cannot see how it will do the mills any harm, or the consumers any good. It will simply build up the industry of Canada. Do not think their industry can be singled out for tariff revision. Must go down the line."

"Would be opposed to the duty being removed on pulp or paper. While it would make no difference in the line we manufacture, it would be a very serious matter for the print mills of this country."

"If we read the signs of the times correctly, the moment the duty was taken off the commodities referred to Canada would immediately put on an export duty much heavier than the duty now levied by the United States."

"Would not object to reduction of tariff duty on pulp and paper, providing arrangements were made with Canadian Government to allow Canadian pulp wood to come into the United States without export duty, and on same basis on which Canadian mills receive their wood supply."

"Satisfactory if Canadians remove their wood restrictions; otherwise free trade with Canada."

"We are most emphatically in favor of repeal of all duty on wood pulp. The duty must be taken off pulp, and the sooner it is done the better it will be for every paper mill and consumer as also for the preservation of our own forests."

"We are not opposed to the repeal of the duties, provided an arrangement can be made whereby Canada will permit the exportation of pulp wood *without* export duty. The supply of pulp wood as you well know is very important for the paper making interests of this country; and if we let the bars down on paper and pulp from Canada, we should have some guarantee that their pulp wood can come into this country free so long as the pulp and paper does. Such an arrangement in our opinion would work no detriment to the American paper manufacturer; and we think with free wood we can stay in the game as long as the Canadian paper manufacturers. We have thought for some time that wood pulp and sulphite pulp should come in free, but have not been quite clear on the paper question. If paper manufacturers can be assured of free pulp wood, in our judgment there would be no objection to the repeal of duty on paper from Canada."

"Aside from any recommendation by the President we believe it would be wise to take off the duty from all wood pulp, both mechanical and chemical; also believe in lowering the duty on paper to say 20 per cent., which would afford a reasonable measure of protection."

"If Canada will take her duties off we would be glad to have duty off of our country."

"In Canada there is a widespread demand that the Canadian Parliament should enact an export duty on pulp logs. The American papermaker is not getting raw material from Canada, because his field of supply is exhausted. If such an export duty were imposed there it would merely mean that the cutting in American forests would be increased. The imposition of an export duty on pulpwood on Canada's

part would probably mean that American capital would cross the border and build up mills there, thus distributing its money through pay rolls in the Dominion rather than in the United States. This would not be a step of benefit to our own country and its people, I believe." And so on.

These are the opinions of the manufacturers across the line whose interests are vitally affected. The conclusions are obvious.

The Georgian Bay Canal.

Mr. Rowley passed from the subject of pulp and paper, to a discussion of transportation, which is closely bound up with all industries. He said in part:

The Key to the Situation.

The great problem of transportation on this continent is the passing of the products of the West that are all east-bound to the ocean. There is only one present practical solution for the relief of the congestion that has arisen and is increasing, and that is the construction of a water-way from the Great Lakes to the Seaboard that shall do away with the necessity of transferring freight at intermediate ports or points. Canada holds the key to the situation in the building of the Georgian Bay Canal. The economy of water transportation is no longer questioned, as it is now well known that the rate per ton per mile will thus be about one-sixth of the lowest present rate by rail.

The Georgian Bay Canal route is 600 miles shorter than the present best (but circuitous) route by the Welland and St. Lawrence canals; it is also well known that by the Georgian Bay canal route the time consumed will be only about 4¼ days or about 3 days less than are now consumed in the passage.

Commerce of Great Lakes.

The enormous magnitude of the commerce of the Great Lakes is represented by the vast tonnage that passes through the Soo Canal—over fifty-one million tons in 1906, which is over seven and a half million tons more than went through these canals in 1905. This traffic has doubled in the past six years. The lumber traffic, which amounts to over five and a half million tons, will at once be added to these large figures, when the Georgian Bay Canal is opened.

Coal from Nova Scotia to the volume of one and a half million tons already comes annually to Montreal (some as far west as Ottawa), but with the Georgian Bay Canal Nova Scotia coal can be laid down all along the route as far west and north as North Bay, thus pushing our coal supply 200 miles further north and west, and laying the coal down there as cheaply as United States coal is laid down at Toronto now.

35,000,000 tons of iron ore passed through the Soo canals last year.

Pulpwood, now shipped by rail from the Nipissing district at a cost of $3 and up a cord, could be sent to the mills by the Georgian Bay Canal in vaster quantities at a much lower cost for freight.

The stone and marble quarries near Portage du Fort and other points all along the proposed route of the Georgian Bay Canal only await development until the opening and operation of the canal.

The cement industry, and this is the "cement age," will then develop all along the canal route in a way that now may look like a dream to some, but will be a paying and profitable enterprise when we get water transportation.

Thus cheap waterways will give to Canada an open market to the world, a market of which we have so far only touched the edge and fringe, just as I have only touched the edge and border of the subjects about which you have been good enough to be interested in hearing from me for the past few minutes.

"WE GET BETTER WORK FROM THE MEN."

This was the answer of the manager of a large industrial institution who was asked by a representative of the *Congregationalist* and *Christian World* if it paid, in a financial way, to treat his men with human consideration and generosity. It shows that even these virtues, when practised voluntarily and in kindness of heart, have a value that can be weighed from the ordinary commercial standpoint. The industrial establishment in question employs some 300 men, and has paid the wages of old employees during sickness and disability. Instead of laying off one-third of the men during a recent shrinkage in output the work was reduced to four days a week, and the men were allowed for these days ten hours' pay for nine hours' work. This was a purely voluntary grant or consideration to the men. It is a distressing paradox that men can win shorter hours only when there are not sufficient hands to do the work, and employers can resist such demands or force longer hours only when men are abundant and labor a drug in the market. The response of the men in better work shows that they in a measure pay back the favors freely extended. Whether such favors are partly, fully or abundantly paid back is a question that does not admit of a general answer from a strictly financial standpoint. But it is a world-wide truth that the man, whether employer or employee, who treats his fellow-man with human consideration has his reward already, whatever additional reciprocal favors may be accorded him.

One of the most familiar sources of trouble between employers and employees is the impression that the one confers a favor on the other. Some employers fancy that the giving of employment is a favor for which the recipients should be grateful. This feeling that a debt exists leads them to regard a few minutes' extra work after quitting time, a little more energy, or a greater effort as merely a partial repayment. This leads to an unconscious aggression which workmen are in time impelled to resist by the troublesome and ill-fitting rules of a trades union. Another source of trouble is the disappearance of human relationships with the organization of industry. The employer is generally a board of directors who cannot have the sympathy or understanding that would come with a personal acquaintance with their men, such as existed under earlier conditions. The intermediaries realize the impossibility of making either understand the other. They face the demand for greater results and less expense on the one hand and the resistance or aggression on the other.

In the midst of so much distressing antagonism it is refreshing and at the same time instructive to hear of an employer practising toward employees the higher virtues he is inclined to practise toward his friends, and to learn that it brings financial as well as other rewards. The rocks and shoals in the way of semi-benevolent employing enterprises are many, and disaster is generally the end. But for all this, human kindness is not going out of the world, and it still brings its sure reward of appreciation and personal contentment.—*The Globe.*

The Canadian Fish and Cold Storage Co. has been organized, with a capital of $1,500,000, to handle all kinds of food fish on the Pacific Coast. It is proposed to erect at Prince Rupert the largest cold storage plant in the world, capable of holding six million pounds of fish, with provision for doubling its capacity later on. The directors are Andrew Kelly, of the Western Canada Flour Mills Co.; Jas. Carruthers, Montreal; J. W. Stewart, Winnipeg; Geo. H. Collins, Vancouver, and Greer Starratt, general manager of the New England Fish Co. Besides a cold storage plant, the company will operate ten large motor boats. Building operations will commence in the spring.

Views and News

NEW TRADE COMMISSIONER.

Mr. E. H. S. Flood, of St. John, N.B., has been appointed by the Canadian Department of Trade and Commerce to the position of Trade Commissioner to the Bermudas, British Guiana, and the British West Indies. This is in line with the general movement to cultivate trade with these colonies.

WANT A WEEKLY SERVICE.

The Board of Trade of Toronto think that Canada is not getting her share of the business of the West Indies. Out of $82,000,000 trade enjoyed by the islands last year, Canada only got about 10 per cent. This condition the Board think could be improved by the establishment of a more frequent steamship service. There is no doubt that the big hold the United States have on that market results from the quick service by which an order can be filled promptly. At present Canada has a monthly service by the Pickford and Black steamships. If by chance an order is given at an odd time it may take three months to have the goods delivered. So long as this condition lasts a satisfactory trade is practically an impossibility. The subject received careful consideration during the year by representatives of Canadian trade bodies who visited the islands, saw for themselves the resources and possibilities of the country and became personally acquainted with the needs of the people. The present movement for the more thorough development of a mutual trade relationship is a direct result of this trip. Whether a weekly service, as has been advocated, would be justified by the business offering will have to be the subject of careful investigation. The fact that the business is not immediately present does not in itself vitiate the scheme. The big point to be kept in view is the fact that there is $82,000,000 of trade being done, and on the face of it, Canada appears to be the most suitable country to handle it. Alike for reasons of sentiment and utility both countries would welcome an increased trade. We are assured that Canada is looked on with the utmost favor by the West Indies, that through their common allegiance a Canadian who has goods to sell is always received sympathetically, and where possible preference is shown to him. Then, too, Canada consumes large quantities of the goods the West Indies produce and vice versa. The foundation of a mutual trade is present in that fact. The efforts of the Toronto Board of Trade will be watched with the utmost interest.

MAY REFUSE ORDER.

An interesting legal decision was given by Chief Justice Sir William Mulock at North Bay recently. The action was entered by D. L. MacKinnon, of Sudbury, against the Wheat City Flour and Milling Company, of Brandon, for damages for non-delivery of four cars of oats. The defendant's traveller called on the plaintiff in September and took an order for four cars of oats at 54 cents per bushel. This order was forwarded to the head office of the defendant at Brandon, and was immediately declined by wire, defendant not having a sufficient supply of oats on hand.

The plaintiff contended that the order was an out and out sale, but defendant contended that the order was simply an offer to purchase, which offer was not accepted but refused. Oats almost immediately after the order was refused advanced greatly in price.

Evidence was given by the defendant at the trial to show that according to the custom of the trade in Canada by commercial houses employing travellers the travellers do not make binding contracts, but simply take orders which are mere offers to purchase and consequently may be accepted or declined by the employers of travellers, and that the reason for this is twofold, namely, that travellers are not in a position to decide as to the financial standing of the persons giving orders, and that the seller may not have the goods on hand when the orders reach the firm.

With this view the Chief Justice agreed and dismissed the action with costs

TOO MUCH IDLE GOLD.

It is now time for the Dominion Government to consider the wisdom of keeping forty-four and a half millions of gold idle in the treasury vaults. This immense reserve, over seven dollars per head of the population, is held largely for the redemption of Dominion notes, and it is certainly away above all the demands of safety in any panic that can possibly overtake the Dominion. The law requires as a safety fund against the first $30,000,000 of Dominion notes outstanding a reserve of 25 per cent. in gold and securities guaranteed by the Government of the United Kingdom, the proportion of gold to be not less than 15 per cent., or $4,500,000. For all notes outstanding in excess of $30,000,000 the law requires a reserve of gold dollar for dollar. Under this act the reserve accumulated, according to the latest published statement, is $46,564,410, made up of gold $44,617,743, and guaranteed securities £400,000, or $1,946,666. Of this, $6,142,611 is required to guarantee deposits in the savings banks, leaving $40,421,799 as a reserve against outstanding Dominion notes. The total notes in circulation, for which this fund is intended to insure redemption, is $61,241,544. Of this amount the banks hold, according to the latest monthly statement, $48,131,162.

The law requires the banks to keep as near as possible one-half their reserves in Dominion notes, the minimum proportion below which they must not fall being 40 per cent. The latest statement gives the aggregate reserves as $69,862,098, which would call for a holding of $34,931,049, but not less than $27,944,839. The reserve expected would leave only $26,310,495 in notes that might be presented to the Dominion for redemption. Against this there is in the vaults a net reserve of $40,-421,799 in gold and guaranteed securities. If the banks should allow their proportion of Dominion notes held in reserve to shrink to the legal minimum there would still be only $33,296,705 in fluid circulation and liable to be presented for redemption. The bank reserves might shrink and thus increase the floating Dominion notes, but in times of danger the policy is for the banks to increase reserves and thus increase holdings. Of the Dominion notes outstanding, $37,950,000 are in $5,000 denomination, and $6,282,500 are in $500 and $1,000 denominations. This cuts down the floating currency to $17,-009,044. Of this, $16,080,873 is made up of one's and two's required in daily trade. When it was decided to require a gold reserve of dollar for dollar on all issues above $30,000,000 the aggregate did not seem likely to exceed that sum materially. Now that the aggregate has more than doubled the $30,000,000 it would be well to consider the wisdom of avoiding the waste of idle capital by increasing the amount requiring only a 25 per cent. reserve.—*The Globe.*

AUSTRALIAN TARIFF MODIFIED.

The Trade and Commerce Department has received by cable from Trade Commissioner Ross, Melbourne, the announcement of the following changes in the Australian general tariff just made by the Lower House of the Commonwealth's Parliament. The new rates are reductions from the tariff as originally brought down: Newspaper on free list; wall paper, 20 per cent.; bicycles, 30 per cent.; motor cars, 35 per cent.; vehicles, 35 per cent.; harvesters, £12 sterling; strippers, £6 sterling; pianos, 30 per cent.; organs, 20 per cent.

AN ADVANCE ON WIRELESS.

A student of electricity has succeeded in operating electric lights and motors by electric magnetic waves, without the use of wires, at a distance of nine hundred feet. He expects to be able to transmit power regularly and in a practical manner over long distances by wireless. We have ceased scoffing at any claim or prophecy in which electricity is concerned.

THE ONLY TAX ON TRAVELLERS.

Prince Edward Island is the only province in Canada which now imposes a tax on commercial travellers. The Dominion Commercial Travellers' Association drew attention to this at their recent meeting in Montreal, and they have decided to take vigorous steps to have the impost removed. They point out that at the time the provinces were asking for an increased subsidy from the Federal Government, it was practically made a provision of the granting of an increase that the tax on commercial travellers should be repealed. All the other provinces have carried out this understanding. The government will therefore be urged to hold up the increased subsidy to Prince Edward Island, until such time as that province shall remove the objectionable tax.

SOME INNER HISTORY.

The inner affairs of the Standard Oil Company were discussed by the Vice-President of that corporation, in a recent issue of the *Saturday Evening Post*. The statement is of interest for several reasons, no less for the unprecedented energy and world-wide range of activity exhibited so successfully by the company, than for the persistent opposition to it which has become a tradition among the newspapers of the continent. The writer of the article in question maintains that this hostility is without reason, and that it is largely the result of exceptional success, legitimately won. There can be no doubt that there has been passing over this continent a wave of unreasoning opposition to capital, an opposition in many cases so senseless as to be directed against companies which are doing a great work for the very people who oppose them, in supplying them with labor and with the necessaries and luxuries which make life livable. But in all cases the heaviest shafts have been hurled against the Standard Oil Company, with the result that it now holds a reputation for exacting extortionate profits and for waging a merciless war against its rivals, if any can be called such.

The experience of the past twenty years has proven one thing conclusively, that a policy of silence is not advantageous to a corporation. It pays to take the public into one's confidence. Had the statement which now appears from the pen of Mr. Archbold, been published from time to time during the growth of the company, much of the criticism of the company would never have taken place, nor would the settled opposition on the part of the public have become so strong or widespread.

This is the proposition. An ordinary oil company would get its revenue from refining oil and selling it. From such operations a fair profit would be expected. Another company would develop oil fields and supply crude petroleum. On this, too, a fair profit is conceded. Another company is engaged in the transportation business. Crude and refined oil must be transported, and this work entails a further profit. But the Standard Oil Company, exhibiting business abilities of a high order, gradually entered all these fields, and not only produced, manufactured, transported and sold oil, but they did each of these operations more efficiently and more cheaply than had ever been done before. Nor did they stop there. They found that they could manufacture barrels and other containers more cheaply than they could buy them, they went into the manufacture of oil-well machinery, of lamps, chimneys and wicks, they utilized by-products. As a consequence of all these activities and savings they have been able to pay a dividend of 40 per cent. on their capital. In this connection it is worthy of note that unlike many other industrial companies, the Standard did not anticipate its future greatness, in its capitalization. No criticism has ever been made that the company was over-capitalized. Mr. Archbold pertinently asks whether, if the founders, forecasting the future, had put the capital at $500,000,000, instead of one-fifth of that sum, and had consequently paid 8 per cent. instead of 40 per cent. dividends, would there be any great criticism of undue prosperity

In other words, if a company shows pre-eminent ability to economize and to lessen the cost of manufacturing and selling, should it not reap the benefit of its business acumen and its enterprise? As a concrete instance from the present article, we find that formerly oil was conveyed to Europe in barrels, with a loss by leakage in transit of from two to three per cent. The Standard company built bulk tank steamers, and now carry it with a loss of one-half of one per cent. Are they not entitled to the benefits from that saving? The cost of shipping oil from America to Europe has been reduced in twenty years from $6 a ton to $2.50 by improved methods devised and put in force by the company. There are other equally interesting details of the business given; in fact the story of the company's growth provides one of the most absorbing chapters of industrial history. It is understood that it will be the policy of the company in future to inform the public of its business. Such a policy should remove much of what is unjust in present day criticism of its methods.

WOULD ELIMINATE ROYALTIES.

Members of the Canadian Institute of Mines are dissatisfied with the present mining regulations in Ontario, in regard to taxation. Representatives who waited on the Government recently, pointed out that the 3 per cent. tax on ore was put on at a time of abnormal activity, when through excitement and speculation the profits of mining were made to appear extremely large. Now that the boom has subsided such is shown not to be the case. It is therefore urged that the Government appoint a commission to consider mining legislation as it appears in other countries and also to get the advice of practical mining men, in order that the recent act to tax mines be amended. The representatives maintained that the present Act, calling fo rthe payment to the province, of royalties, operated so as to prevent foreign capital from being invested in this province. While it is unlikely that a commission will be appointed, consideration of the claims of the petitioners was promised.

CHINESE CONSULS IN CANADA.

A despatch from Vancouver states that the Chinese Government will appoint consuls in a number of Canadian cities. Whether they are to act as commercial agents, for the purpose of developing greater trade between the two countries, or whether their chief work shall be as interpreters after the periodic descents on fan-tan games by zealous police officers does not appear.

HOW THE FARMER WAXES FAT.

We call attention to the following schedule of prices for farmers' produce during the month of December, 1906 and 1907. It is interesting in view of the farmers' contention that the manufacturer is being protected at his expense. Where can a similar advance in price be found in the case of manufactured articles?

	1906.	1907.
Hay, per ton	$8 50	$15 75—$16 00
Oats, per bush	0 34	0 42
Wheat, per bush	0 68	0 90
Barley, per bush	0 43	0 45
Flour, per cwt	2 30	2 90
Turkeys, per lb	0 14	0 14
Geese, each	0 85	1 00
Ducks, per pair	0 80	0 90
Chickens, each	0 40	0 40
Butter, per lb.	0 23	0 27
Eggs, per doz.	0 24	0 30
Potatoes, per bag	0 90	0 90
Apples, per bag	0 60	0 75
Live hogs, per cwt.	6 00	5 00

NEW ALL-RAIL RATES FROM EASTERN CANADA TO MANITOBA, ALBERTA, SASKATCHEWAN, BRITISH COLUMBIA AND THE KOOTENAY.

The new all-rail class rates from Eastern Canada to the Northwest went into effect on December 23rd, and to the Kootenay on the 26th last. As previously announced a general reduction has been made. Montreal has been placed in the same group as Western Ontario, so that the same basis of rates will apply from all stations, Montreal to the Detroit River. These rates were voluntarily put into effect by the Canadian Pacific Railway. One reason assigned for them was the fact that there was too much difference between the lake and rail and the all-rail rates, and as a result the lake and rail shipments, particularly just before the opening and close of navigation were very heavy. In the latter case the carriers give free storage at Fort William for an indefinite period so that the merchants who were able to take advantage of the lake and rail rates, and this free storage, were placed at a considerable advantage over the merchant who had to pay the all-rail rates. It was, therefore, decided to reduce the all-rail rates to as far as possible meet this situation. Another advantage which is expected from these new rates is that the business will probably be more evenly distributed throughout the year.

WILL NOT SCARE CAPITAL.

The opinion very widely prevails that the chief danger which confronts Canada in the disruption of normal conditions resultant upon the financial panic in the United States is a cessation of interest in the Dominion on the part of outside capital. We are inclined to question the accuracy of this view. Canada has just been put to a crucial test, and the splendid manner in which it is riding out the storm is eliciting world-wide praise, particularly in respect to the soundness of our banking institutions. We feel, then, that now, perhaps more than ever, we may count on receiving ample attention at the hands of foreign investors. The *Ottawa Citizen's* view of the situation is that Canada is becoming a wealthy country, and, unlike our neighbors to the south of us, our wealth is well distributed. Our laws are such as to really conserve the common weal and prevent the illegal acquirements of gross fortunes. The present prospects in the several lines of trade are good. The gist of the opinion of the directors of our greatest financial institution is that the only effect upon Canadian prosperity that we may anticipate as a result of outside conditions is a restriction in the inflow of capital necessary for the continuous exploitation of our magnificent resources. Whether the restrictive period will be long or short it is impossible to say.—*Victoria Colonist.*

A POSSIBLE SOLUTION.

Prof. L. P. Breckenridge, of the Steam Engineering Department of the United States Geological Survey, Washington, D.C., has a solution of the smoke problem which is very simple and which has been laid before the Survey Department for consideration. Prof. Breckenridge says:

"The essential thing is to have the boiler so placed that the flame from the coals does not touch it. The flame striking the boiler prevents a proper and complete combustion and results in making smoke. Light a candle and it will burn without smoke. Place a saucer in the flame and there will be plenty of smoke. So it is with the fire under the boiler. Little depends on the type of boilers.

"Of course different coals give different lengths of flame, according to the amount of volatile matter they contain. This means that the distance between the boiler and the grate must vary to suit the coal used. But I am of the opinion that six different types of furnaces will be sufficient to burn any coal in the United States without smoking. We are able to tell the amount of volatile matter in coal by chemical analysis, so if a manufacturer learns the chemical contents of his coal he will discover the length of flame it will make in burning, and adjust his furnace accordingly. Hundreds of chemical analyses of coals have been made by the technological branch of the Geological Survey, and it will keep the work up until we know every coal in the United States. Then there will be absolutely no excuse for smoke anywhere.

"Another point I should mention is that so long as there is hand-firing the smoke nuisance will not be completely done away with. Mechanical stokers must do the work if there is to be perfect combustion, and the coal used must be nearly uniform in size."

In his experiments at the University of Illinois, Prof. Breckenridge operated the heating plant of 2,000 horsepower for two years without smoke and at a saving of $5,000 a year over carelessly managed commercial plants. One boiler was so well constructed and managed that it was practically impossible to make it smoke, even when special efforts were put forth to do so.

Work will begin at once on the big mill to be erected by the Red Cliff Lumber Co., at Alberni, B.C. Railway connection has been completed by the E. & N. railway, and two other lumber companies have now selected sites for large mills.

How Freight Rates are Made

By John Pullen, Assistant Freight Traffic Manager, Grand Trunk Railway

THERE is no branch of the traffic work of which so little is known to the outside world as that of making freight-rate schedules. The public demands, and is entitled to receive, fair and reasonable freight rates, so adjusted as to avoid unjust discriminations. With the keen competition between rival manufacturers and merchants, the prime requisite is that there should be stability of rates, fairly related, and given to all without partiality. A freight officer is sometimes asked—"How do you make these freight rates? What is the basis upon which you start? How do you determine what is a fair and reasonable rate? With the thousands and thousands of rates which you make, how do you determine what each shall be and the relation between them?"

In this brief paper it is possible to mention only a few of the factors which enter into rate construction. Distance is



Mr John Pullen

one. The rate is the unit of compensation for the service performed. Obviously then, the rate should increase with the distance; but distance alone does not determine the rate. Oftentimes, the element of distance must be dropped as the result of competition, either of water or of a rival rail line. If there be two or more railways between two given points, and the distance by one is longer than by the other, the railway having the longer route must, of necessity, carry its freight between these two points at as low a rate as its rival, which may be fortunate enough to have the shorter line. If a railway parallels navigable waterways, then its rates must, of necessity, be kept down to the lowest possible figure, otherwise all the traffic would be attracted to the water routes. In both these cases the element of mileage must be eliminated—competition, not the railway, determines the rate. Rival trade centres, though some distance apart, keenly competing in certain territory for the same trade, must often be given the same freight rates, otherwise one flourishes and the other will languish. To do this, distance must be disregarded. It would be unfair to reply that this lower rate proves that the railway can carry freight at less than the ordinary rate. It does not make this lower rate because it can well afford to do so, but because it must do so or haul its trains empty. It accepts a partial instead of a total loss.

The cost of the service is another factor, but as the cost is sometimes difficult to ascertain with mathematical exactness, and as the cost may differ on competing lines, or in different sections of the country, it is not always a determining factor, but only a guide to fix the point below which one may not go. Here again, competition comes in to determine the maximum rate which can be charged.

The value of the commodity carried is another important factor, because it determines the extent of the risk which the carrier is often obliged to assume under its bill of lading. Thus Cobalt silver ore, which, it is said, is sometimes worth $50,000 per car load, ought to pay a higher freight rate than a car load of sand, which may not be worth $50 per car load, though the weight carried and the length of the haul may be precisely the same.

The average weight loaded per car is another factor taken into consideration for the purpose of securing a reasonable revenue for the service rendered. Thus, a higher charge per hundred pounds must be made on paper boxes, which are light and bulky, than on pig iron, which is very heavy.

Deviations from Maximum Rate.

In Canada there is a maximum tariff fixed by law. This maximum tariff is constructed upon a mathematical scale starting with a certain rate per ton per mile for a certain class of traffic for a given distance. As the distance increases the rate per ton per mile, gradually diminishes, though the rate itself, expressed in cents per one hundred pounds, naturally increases. Each class of traffic, of which there are ten under the freight classification in use in Canada, has a fixed relation to each other class, and this relation is expressed in terms of percentages. For illustration—fifth class traffic may be the unit or 100 per cent., and each higher class takes a gradually increasing percentage until the first class is reached at 200 per cent. The lower classes are similarly diminished. Much of the traffic is carried at rates considerably below those in the legal maximum tariff. The duty of the freight department is to create traffic and not to prevent its movement. Whenever it is shown that the legal maximum rates are so high as to check the free movement of some particular commodity, it would be folly for the railways to refuse to reduce them. Then it is that the rates are made "only such as the traffic will bear." A manufacturer recently told me of his experience in trying to sell a certain article of commerce in China. He knew precisely what it cost him to produce his goods at the factory. He knew also what was the selling price in the world's market in China. The difference between the two was what he could afford to pay for the transportation. The railway company confirmed through its own agents in China the selling price there, and made its freight rate low enough to enable the manufacturer to market his product at a profit. That manufacturer was greatly benefited when the railway company fixed its rate on the principle of "what the traffic would bear." There is no possibility of the public being oppressed by such a method of rate-making as this, and yet we often find the railways ruthlessly condemned for exacting from the public "all the traffic will bear."

Some Factors in Rate Making.

A well-known writer on railway economics, in describing the factors upon which rates depend, recently said:

"Commercial conditions, the exigencies of business, the competition of one product with another product, the competition of one market with another market, the necessity as well as the privilege of developing the latent resources of the territory through which the line runs, or of promoting new industries and thereby increasing the wealth of several communities, these factors make the rates. So strong, indeed, is the force of these elements that a railroad is generally compelled to charge very low rates, and in many cases, unreasonably low rates. Rates that will attract traffic and that will enable producers in the territory contiguous to a railway to reach their markets and increase their production must be accepted or the business will not move. That economic laws make railroad rates would be a matter of common knowledge if well-known facts were applied."

Advantages of Agreement among Carriers.

A glance at the map will show that railway lines cross and recross each other in the thickly-settled parts and oftentimes closely parallel each other in all sections of the country. The large mercantile centres enjoy the benefit of several railway lines, each eagerly competing for traffic. If all these competitors were to allow the fighting instinct to govern their actions, and if their rivalry was not conducted with some degree of fair play and a spirit of tolerance each towards the other, there would be an utter lack of rate stability and unjust discriminations as between shippers and as between localities would prevail. Merchants and manufacturers would be in a constant state of uncertainty as to what rates their rivals were getting, and prices would be unsettled throughout the entire country. Any reckless competition between carriers would also result in a rapid decline in freight rates, and sooner or later be followed by railway bankruptcy. To avoid such unfortunate occurrences the freight traffic officers have organized committees and associations, through the medium of which matters of common interest are discussed and agreements made which are in harmony with the laws governing common carriers. In some countries the public have become so alarmed at what is alleged to be combinations in restraint of trade that restrictive legislation forbids railway companies making agreements with each other for uniform rules and traffic regulations. Wisely, in Canada, this extreme legislation has not been adopted. Railway associations are here permitted to exist and they serve a useful purpose. The cardinal principle of the Railway Act of Canada is to forbid discrimination. Discrimination cannot be avoided where each railway pursues a policy of unrestrained competition regardless of the welfare of the country or of every other carrier. Much assistance has been given by the associations to the Board of Railway Commissioners in their efforts to justly administer the laws. And not only have these associations been thus helpful, but they have been helpful in disseminating among the members information of a practical character and in exchanging experiences by railway officers from all sections of the country. Some of the most profitable knowledge which the railway officer gains is obtained in the discussions of railway problems at the meetings of these associations. The wiser legislators in the United States are rapidly reaching the conclusion that the laws there should be amended so as to permit this educational work to go on.

Shippers Should Receive Good Treatment.

A paper of this kind would not appear complete without some further reference to the relations which ought to exist between the public and the railway. It is of the highest importance that friendly relations should always exist between the company and its patrons, because, after all, continued success can only be attained through the public good-will. The railway has transportation for sale, and the public will buy this transportation from that railway from which it receives the greatest amount of consideration in respect of the service, and service includes not only reasonable freight rates, but, what is perhaps more important, expedition in the movement and delivery of goods. The merchant who keeps an attractive store and employs courteous and talented salesmen to display and sell only the very best and most reliable of goods, is the one who attracts and keeps customers, and so it is with the railway. Its stations and offices should be kept neat and attractive, its passenger trains equipped with the necessary comforts for travel and kept as punctually as possible on advertised time. Its freight train service should be operated on a schedule, and its employees everywhere should be polite and accommodating. If in any of these things it be deficient, to that extent the service is rendered unattractive to the public and the result is reflected in decreasing earnings. The reputation of a railway company is just as susceptible to damage as that of the merchant, if proper service be not given, and it is just as readily enhanced when the public is pleased. People delight in telling with pride of some remarkable achievement in railway management which has come under their observation, and are just as ready freely to condemn when their reasonable expectations are not realized.

There is no other question which engages so much of the public attention to-day as railway transportation. The railway company is ever in the public eye. Every move of the railway is watched and praised or criticised. The officer and employee should, therefore, be ever alert to ascertain the public requirements, and as far as possible comply with them. He should be ready patiently to listen to every complaint, no matter how trivial it may seem, and make an honest effort to comply with the desire of the customer, or explain carefully why it is not possible to do so.

Where the Shipper Fails.

The public is exacting and occasionally, perhaps, inclined to be unreasonable, but as a rule it is considerate of the railway company and makes due allowance for unavoidable failures. People do not always understand why the crops of the country cannot be moved to the market within a few weeks of the harvest, or why there should be any shortage of cars in a certain section at a time when the railway is putting forth almost superhuman efforts to take care of the crop of perishable freight before winter weather destroys it. They do not always appreciate that terminals become congested with the enormously increasing traffic, while they themselves have withheld their co-operation by neglecting to increase their own "terminal" facilities at the factory or warehouse. Many merchants to-day are months behind in their orders because they have not increased their manufacturing and shipping and receiving facilities from year to year as their business has expanded. Many order at one time more goods than they can promptly take away from the railway tracks, thus causing serious detention to railway equipment, resulting in yard blockades and a further shortage of cars. The railways spend yearly a large part of their earnings in adding to their engine and car equipment and station and track facilities and can be depended upon to do their share in preparing to handle the ever-increasing traffic of this rapidly-growing country.

The Demand for Cheaper Transportation.

For some time past there has been a growing demand from the public for cheaper and better transportation of both

passengers and freight. As to cheaper freight rates, no doubt this demand is born of a desire to recover some of the diminishing profits which result from the demands of labor for increase compensation, and from the higher cost of material and supplies, rather than from any well-founded conviction that rates are in themselves too high for the servict rendered. The public, and we fear also the railway commissions, sometimes lose sight of the fact that the great transportation companies equally feel the increased cost of labor and materials, as well as increased taxation, and are not only unable to make a corresponding increase in their freight rates and passenger fares, as every manufacturer or merchant may do in his prices, but are subject to the most serious enforced reductions in both. Is it reasonable or just to expect that the cost of everything else should rise, while at the same time the price of transportation should fall? It is obvious that with the diminishing unit of revenue and increasing expenses, the railways must slowly but surely reach the point when net earnings disappear, when their credit will be seriously impaired, and when they cannot raise in the financial markets of the world sufficient capital to carry on the work of improvement and expansion which the growth of the country requires. If they cannot guarantee investors that their money will yield fair returns, they cannot borrow. If they cannot borrow money they cannot spend, consequently, the country suffers from the unavoidable curtailment of railway expenditures. For every dollar which a railway earns from its traffic it pays back approximately 70 cents to its employees for labor, to manufacturers and merchants for supplies, and to the country in taxes. If its rates are reduced by say 20 per cent., it can only earn 80 cents where formerly it earned $1.00. It will, therefore, be able to spend only 56 cents where it spent 70 cents before. It must reduce its expenses in the same ratio as its earnings are cut down. This would involve possible deterioration in the physical condition of the track, rolling stock and of service and reduction in wages, which would inevitably result in strikes and all sorts of labor troubles. The public, which sells to the railways, will soon find that they are losing rapidly the business of their largest customers. Furthermore, the railways will be prevented from improving, as they wish to do, their transportation facilities, and from increasing their locomotive and car equipment, which the public demands as a necessity to meet the growing requirements of the country.

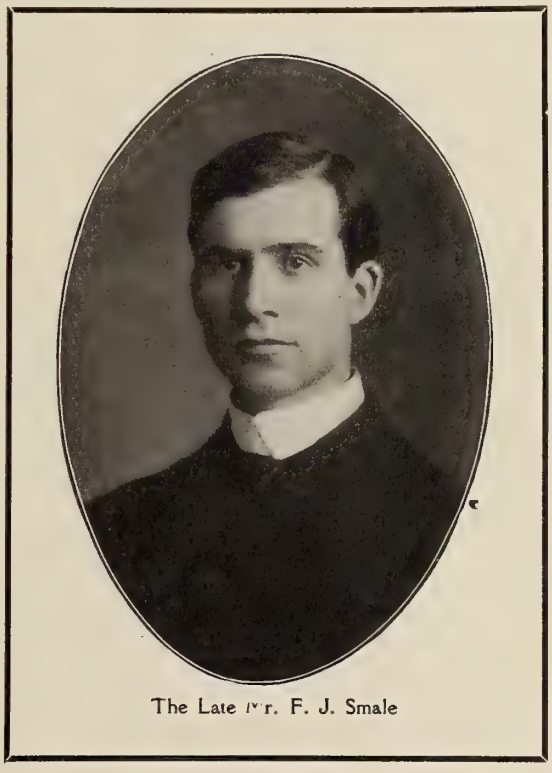
It requires only an ordinary mind to grasp the truth, that if the country is to prosper and expand, it can only be done when the great carrying companies are permitted to prosper also. The material interests of the country and the material interests of the railways are so closely interwoven that when one suffers the other suffers with it. When one prospers the other prospers also. The lesson to be learned from this may be summed up in the old adage: "Live and let live." Meantime, with the public demanding and the legislatures enforcing lower rates on the one hand, and anxious stockholders on the other, the lot of the present day railway administrator is not a happy or an easy one by any means.

DELAYING FREIGHTS.

Can cargo, shipped to go by a certain vessel, be shut out and taken on by another vessel, of the same line, sailing subsequently, the vessel owners not being liable for the delay and consequent damage incurred? This is the issue raised in an action brought against the Hansa (German) line of steamships and their agents at Calcutta. The case was before the bench on the application of the defendants to have the case transferred to a higher court. Counsel for the application said the important question involved was, whether a shipping company, when freight was booked to go by a certain ship, were bound to take it by that ship, the time of sailing being stipulated in the usual way. The plaintiff's case was, that the goods in question were for May shipment to London, and that the company were bound to take the cargo by that steamer provided it was delivered to them on their wharf by May 31. The defendants' case was that they were not so bound, if there was not space on that particular steamer, and in this case the goods were shipped by a subsequent vessel on June 8, or one week later; they therefore denied liability. His Lordship considered the case of sufficient public importance, although the damages claimed were small, to send it to a higher court.—Alex. MacLean, Yokohama.

DEATH OF MR. SMALE.

In the death of Mr. F. J. Smale, of the William Davies Co., Ltd., Toronto, the business world has suffered a distinct loss. In his short life he found time to accomplish much. After completing a university course of great brilliancy and devoting a few years to advanced research, he became connected with the William Davies Co. as chemist, and in a short time assumed the duties of the assistant general managership, a



The Late Mr. F. J. Smale

position he held with fine success. Nor did he permit his own business duties to absorb all his time. Many a cause of public benefit has been furthered by his advice and active assistance. He was a member of the Canadian Manufacturers' Association, having served on various committees, the "Industrial Canada" Committee in particular having received the benefit of his great abilities. His premature death is keenly regretted by a very wide circle of friends.

The mines and smelters of the Granby Co. have reopened under an agreement with the workmen to accept a reduction in wages. About 1,200 men are employed.

Books of the Month

THE EVOLUTION OF SOCIETY.

The copyright on Morgan's "Ancient Society," a historical classic, having just expired, Charles H. Kerr & Co., of Chicago, have issued a cheap reprint which will be welcomed by all students of social development. It is interesting to note that it is now published as one of a series of books of direct interest to those of socialist leanings. But Mr. Morgan's able volume is of equal value to the socialist advocate and to the unbiased student. Its serious study will broaden and strengthen every student's understanding of this fundamental truth; that all progress is the result of well-directed effort, and the outcome of long ages of rough experience and stumbling experiment. It proves to a demonstration that there is no quick jump into elysium, and that each step forward is gained slowly.

But such a survey of the evolution of society is a message of encouragement to all students—employers or employees or others. It reminds them that we owe, in the words of the learned writer, "our present condition, with its multiplied means of safety and of happiness, to the struggles, the sufferings, the heroic exertions and the patient toil of our barbarous, and more remotely, of our savage ancestors. Their labors, their trials and their successes were a part of the plan of the Supreme Intelligence to develop a barbarian out of a savage, and a civilized man out of this barbarian." Those wishing to continue their study of industrial society will find Bucher's "Industrial Evolution" (Henry Holt, New York) helpful.

THE WORKMEN AS A POLITICAL CLASS.

Have the Laboring Classes Prospered Since 1893?

The socialist press of America is becoming more aggressive and outspoken; and there is no denying it has put its finger on a number of desirable changes in political and industrial conditions. But it is just as true that from the mass of nonsense published it is often hard to winnow right from false in statements made, so inaccurate and misleading are the irresponsible observations. Very often all one can say is there is just enough truth to give an excuse for a new publication. This can be said of a small book just issued by Kerr & Company, of Chicago, "The Rise of the American Proletarian," by Austin Lewis.

The author seeks to show that the industrial history of the United States is the history of the influence of money over politics; that the Senate and Congress hold the fort for it to-day; that the result is dire political corruption and rottenness, and that the working class is coming to feel itself a class apart and is about to take the plunge and become a distinct political life. This is the result not merely of political conditions, but of the fact that during the last fifteen or twenty years the laboring classes have not only not progressed but have actually lost ground in the good things of this world, and to-day are relatively worse off than during less booming days.

This is an illustration of the author's historical and scientific immaturity. In the first place it is not true that the working classes have not progressed. They live better and enjoy life more than they have for a long time. Thousands of them have become employers, and they are enjoying a greater share in public benefits of all kinds than ever. Whether their lot has changed for the better as fast as their employees is more open to question. But we must remember the world is passing through perilous times, and the basis of values is changing. Gold is falling, interest and all other prices are rising, and in the shifting of rates (wages, income of all kinds), hardships and bitter feelings frequently—and necessarily so—arise. Probably not for another four or five years can we expect to reach relative equilibrium again.

A GUIDE TO PRESENT FINANCIAL CONDITIONS.

Those seeking for an exceedingly helpful little book on present conditions which is at the same time an excellent explanation of the problems raised by Mr. Austin's book will find it in Mr. Thomas Gibson's "The Cycles of Speculation." (The Moody Corporation, New York. 1907. Price, $1.50.)

The conclusions come to are worth careful reading, and the book will well repay purchase. Some of the conclusions are as follows:

(1) The increased production of gold will lead to a still higher level of values, higher interest rates and lower prices for bonds and other long-time obligations.

(2) Fixed charges will be more costly.

(3) Real estate values of all kinds will rise.

(4) Cost of living and wages will rise, though not so fast, and unrest or strikes will be not infrequent.

(5) Higher prices mean not real prosperity, but only a marking up of things and great industrial confusion, in which some make and some lose. The greatest profits fall to the propertied classes.

(6) The political, social, and industrial world will all be affected.

The second part of the book is taken up with a well written explanation of market terms and usages. Altogether the volume is one to be highly recommended to every reading business man.

THE SEASON'S GREETINGS.

A Souvenir of the West.

Each year brings a souvenir from the *Manitoba Free Press* which is more interesting and attractive than those which have gone before. This year the remembrance takes the form of a miniature barrel of flour from the now famous Peace River valley, where wheat is grown up to within 400 miles of the Arctic circle. The barrel is an exact reproduction in miniature of the product of the Vermilion mills. A glance at a map will show what an immense agricultural tract is embraced in the Canadian West, when the highest grade of grain can be grown far to the north of Edmonton. It is only when some picturesque representation like the present is brought to our attention that we begin to appreciate the magnitude of our country.

Canada in England.

A calendar and diary has been sent out to its friends by the Canadian United Manufacturers' Agency, Caxton House, Paternoster Square, London, E.C. The souvenir is of metal and contains on its face a commercial Atlas, bearing a map of Canada in his hands. The design is attractive, and the article itself will be most useful, at the same time keeping the name of this well-known agency for Canadian goods before the attention of the owner.

A Pictorial Attraction.

A handsome calendar in colors has been issued by the British-American Brewing Co., of Windsor, Ont. The pictorial part represents a woman in a riding habit, with all the accoutrements for riding worked into the design. The picture is a reproduction of a painting, entitled "The Queen of the Turf," by Clementz, Berlin

The Future of the Small Manufacturer

Shall the Tendency Towards Centralization Continue?

OUR language has become free with words of science. We discuss with fluency, if not always with accuracy, electric power transmission lines and current at the tap. All this is since the discovery, for we may almost call it such, of the transmission possibilities of electricity. Do the developments of the past few years mean anything more than a mere facilitating of business, a possibility for increased production, an enlarging of the industrial activities? Or are they epoch-making, in revolutionizing our industrial life, turning back the stream that for centuries has been flowing city-wards? Centralization or decentralization, that is the question.

Two elements formerly entered to a large extent into the consideration of a manufacturer when deciding upon a location. One was the presence of a water power; the other was the ability to bring in coal at a low cost. There were other considerations of more or less interest, but these were always well to the front. So the lake ports where coal was most easily accessible became the nuclei of manufacturing cities. The tendency for big towns to grow bigger and small towns to stagnate or decline to nothingness was accentuated.

A reversion now to an era of perhaps smaller factories, scattered over the land with small regard for the big cities, would indeed be revolutionary. It would create a social change greater than any which has occurred for many decades. "The great question of the present day is the housing problem." That is a truth which every industrial city has had forced upon it times out of mention. Where many factories are gathered together there is sure to come a congested living district, not only to accommodate the legitimate working people, but even more so to house the by-products of an industrial centre, the undesirables whose manner of life is ever a menace to the public health and morals. Only in large cities do the street hawkers and their like find a profitable and congenial clientele. These are the people who do much to bring about the over crowding evil.

Time and thought have been given to solve the problem. Employers recognize all too well that the home life of the work-people means much to the efficiency of their work. Sordid lodgings, and insufficiency of air and sunlight, squalid surroundings, stifle ambition, stunt natural aptitudes and generally lower the efficiency of the man. Aside altogether from the humanitarian point of view, there is much reason in the effort which is constantly being evidenced, now in one city, now in another, to improve the living conditions of the working classes.

But it is difficult, if not actually impossible, to change the conditions in an established city. In factories and stores a large number of people are employed. Considerations of time and expense alike prevent them from living far from their work. They live in a limited district, which is bounded by walking distances from their work. Hence the tendency is to crowd together more and more closely; the demand for houses in the limited district grows, and with the demand grows the rent; it becomes necessary for two families to occupy the house originally intended for one; the evil of the overcrowded tenement is at hand. The curse of this is increased by the knowledge that the people are paying as much thus huddled together in unlivable conditions as they formerly did for fair accommodation. The housing problem is in good truth difficult of solution.

Transmission of cheap electric power for long distances introduces a new element into the subject of manufacturing. The small manufacturer located away from the larger centres is decidedly strengthened. He can get his necessary power as cheap as or cheaper than his big rival in the city. He is enabled to enjoy several advantages which he would be debarred from under the former conditions.

The desirable conditions of successful manufacturing are briefly: To be as near as possible to the consuming public; to be in the best position for getting raw material at a minimum price; to have a sufficient supply of competent labor; to have power and other necessary adjuncts to manufacturing at the lowest cost.

Having in mind these requisites what are the chances in the future for the decentralization of factories? What chance will the small man have in the industrial contest that is to come? Will the tendency continue towards amalgamations, centralization, or is a change likely?

A concrete example will help to elucidate the problem. Take the case of a wood-working establishment in Western Ontario, after the transmission lines have been built from Niagara Falls. A competent man gets together enough capital to start a small factory. He puts a few machines into a building which he can build or rent for much less than he could in a big city. He engages the requisite number of men to whom he pays less than the big city manufacturer. He superintends the work himself, which constitutes an inestimable advantage in securing consistent results and honest workmanship. No factory system, necessary as it is in the case of a big establishment, can compensate for the lack of personal supervision of the manufacturer, which is possible alone in the less pretentious factory. He has a local market readily reached at small expense, on which he has a sentimental hold through his being a local manufacturer. Finally he has power to run his plant at a low rate. Cheaper land and less taxation, ample facilities for housing work people, etc.

To what extent cheap power has been effective in attracting manufacturers is seen in the case of Hamilton, Peterborough, Welland, etc. In fact these last two municipalities are an indication of a possible change from the former tendency to congregate in big industrial centres. The Welland canal provides a fine water power. Straightway it gives rise to factories. But there is a further point along this same line. The Consumers' Cordage Co. have built their plant outside the town limits. The Canadian Shipbuilding Co. have established yards away from any big centre of population. The Copeland-Chatterson Co. have transplanted their factory from Toronto to Brampton. Many others could be named who have done likewise. There is a reason for it, a business rea-

son. It is an interesting speculation to consider how far that reason will go in causing a general migration.

Not that there are not reasons, many and strong, for the movement of industries city-wards. The large home market at the minimum cost of transportation is of great importance, being in fact in some industries all important. In a big centre of population, too, there is a greater labor market, and it is more easy to meet a sudden demand for a number of skilled artisans. This, of course, is not an unmixed blessing, because where there are many workmen there is also sure to be an agitator, with the result that the cities are infested with extreme trades unionists, the kind who feel that there is a constant conflict between labor and capital. The big cities are the battlegrounds of most strikes. Then transportation must be considered. Naturally railroads converge on the cities; if it is a water shipping port so much the better. There are two points which are especially favorable to the city manufacturer. First, he usually has two or more railway lines, by which he may reach practically any point. Second, being at a terminal shipping point he is likely to get a more satisfactory car service. Without underestimating these at all it may be pointed out that the lack of railway competition, which formerly made the shipper who was thus affected a pretty helpless individual, does not operate in that way to the same extent since the establishment of the Railway Commission. The long and short haul clause of the Railway Act is of importance, but much more so is the assurance that fair treatment can always be enforced by application to the Board. In addition there is a tendency, which is likely to be increased in the future, to run electric lines widely throughout the country. These will make transportation more rapid and satisfactory.

The next few years will provide some interesting developments in the industrial world. What they will be is still only a subject for conjecture.

Communications

TECHNICAL EDUCATION.

To the Editor of INDUSTRIAL CANADA.

DEAR SIR,—With a view to keeping the members of the Association in touch with industrial education, perhaps you will find space for a few thoughts. Industrial education will here be taken to mean all education needed in industrial life, but for the present purpose, the manual and trade schools will not be included in consideration. Reference to commercial work and a university education to manufacturing interests may prove of more than a passing interest.

Technical schools are now being agitated as most important, and equally important should be commercial schools. They are of so much importance that they must not be overlooked in considering the efforts necessary in building up the manufacturing industries of the country. We must know not only how to manufacture but also how to sell our products. The two branches should run together, as training is as necessary in one as in the other. In Germany this is strongly recognized. Commercial methods are placed on a broad educational basis.

The Commercial Colleges, so-called and as now known in our cities, are mainly devoted to qualifying young men as office assistants, but such falls far short of the real meaning of a thorough commercial education. The commercial school should produce the man who can make a reputation for the product of a manufacturer. He should be as important at the helm of commerce as is the merchant or the banker. The commercial school should stand as high as any technical school. The graduate should be equally ready and capable to challenge the distant market as the local one.

Nor should either of these schools be considered as independent of the University. Often the manufacturer looks on young men with academic degrees with adverse interest. Happily this condition is quickly dying, and the sooner this prejudice disappears the better for our industries. This does not mean that practical training may be overlooked. Genius of any kind is born not made, and may create greater success untrained than is achieved by the ordinary talent most highly trained. But as a whole, evidence derived from actual careers of university men shows that among graduates the greatest successes have been formed where men by their education have shown their power of organization, or by their scientific abilities and training their ability to become officers of great undertakings, technical, administrative or commercial.

Universities attract a large proportion of the best young men of the country, and the field for their usefulness to the country should be made as wide as possible. When the industrial life of the country learns of this new university industrial education expansion for the production of capable industrial graduates, the demand from manufacturing principals will be the warranty for Boards of University Governors in establishing registers of requirements, which will be the incentive to ability in choosing vocations congenial to desire.

And this is necessary. The great German philosopher Hegel says: "This is the absolute right of personal existence—to find itself satisfied in its activity and labor. If men are to interest themselves for anything, they must, so to speak, have part of their existence involved in it; find their individuality gratified by its attainment."

This is a consideration of special importance in this present epoch, when people are influenced less than formerly by reliance on others and by authority. Instead they are nearly always moved by devotion to an object, concentrating all their desires and powers upon it, under individual volition.

Such are the thoughts which urge themselves for presentation during the present when manufacturers are considering what shall be done to find educated trained help of all kinds, so necessary for the success of the commercial and industrial interests of Canada. JAS. P. MURRAY.

Mr. Edwin S. Reed, manager of the International Varnish Co. in Toronto since the opening of the company's business in Canada three years ago, has severed his connection with it to engage in business for himself. He is succeeded by Mr. J. E. Ebersole, who was formerly with the Chicago branch of the Standard Varnish Works. Mr. Ebersole is a Canadian who has spent most of his business life in the United States, and now returns to take his place in the industrial life of Canada.

The new building of St. Jerome College, Berlin, is now almost completed. A feature of the building is the metal cornice 6 feet high, which was manufactured and erected by the Metal Shingle & Siding Co., Limited, of Preston, Montreal and Toronto. This cornice runs around the entire building, 356 feet, and adds greatly to its general attractiveness.

WHAT A BLUE BOOK CONTAINS.

A GOVERNMENT departmental report is not generally considered to be the most interesting of documents. We can at least say that it is not the thing one is likely to pick up to pass away a quiet hour. This is not to be wondered at, for a blue book contains a plain statement of facts, more or less interesting as facts, but necessarily unembellished with the picturesque detail or digressions which make a less formal book attractive. Attractiveness is highly desirable in them, because, after all, they are published with the idea of conveying certain information to the public, and unless the public, or someone for them, for instance the press, reads them they fail in their object. Yet the truth cannot be sacrificed to ornamentation and it is hard to imagine that the report of the Department of Trade and Commerce can become anything other than what it is, a series of tables, an almost endless series of tables, of imports and exports, and such other apparently uninteresting, dry and indigestible matter.

But it is only to the superficial person that for instance the September monthly report of the Department of Trade and Commerce is uninteresting, and it may be added that it is not for such that the information is published. There is a real attractiveness about figures when they are giving a strong, clear, vivid representation of the economic life of the country. When we glance down the column which shows the total trade of Canada year by year since Confederation, and when we trace the progress which has been made, the blue book speaks more eloquently than the silveriest of orators. Our imagination may be seized by the statements of the speaker, but our reason is persuaded by the unemotional figures which show that in 1868 Canada had a total trade of $126,591,472, in 1888 this had increased to $189,965,778, and in 1907 to $612,581,351. The very figures in their coldness and nakedness suggest the whole history of Canada during that time, the years of hopefulness that followed the yoking of the Provinces together, the years of doubt and hesitation, when Canada was overshadowed by her bigger neighbor, and finally the years of triumphant progress in wealth and importance.

On the next page we find that for twelve months ending September, Canada imported $66,100,364 worth of goods more than she did during the same period in 1906, and on closer investigation it develops that of this amount $41,950,807 represents dutiable goods, which is equivalent to saying goods which could be manufactured in Canada. The total imports for the year, exclusive of bullion, were $362,459,907, of which $221,465,700 represent dutiable goods. These figures are far from being uninteresting; on the contrary they are of vital importance; they represent a condition which it is the urgent duty of every citizen to consider and investigate. Particularly so since on glancing farther along the page we learn that the exports for the year fell off $1,362,785. Without wishing to stir up any economist to a string of platitudes on the course of international trade, we might suggest that on the face of it such a condition of purchases and sales is not likely to redound to the wealth of Canada.

It is not intended here to discuss the conditions indicated by the figures and tables given in this report; the aim is merely to call attention to the valuable and interesting nature of the information provided. The outside of such a document, it cannot be denied, is usually forbidding. It requires some courage to open it up and get right into it. Yet, unless this be done, there will be little profit or pleasure to be had from it. To illustrate this, we open the report at a double page which is one complete mass of figures—nothing else on the page with the exception of a couple of lines of headings. Not very promising, certainly, but we will overcome our inclination to pass on to the next page and examine it more closely. It is a statement of exports by classes—that is, products of the mine, the fisheries, the forest, animal produce, agricultural products, manufactures, and bullion. It gives the value of the exports of these classes for each of the last ten years. We now see how the $27,322,977 of exports during September were made up. We have been told of late a good deal about the importance of our timber supply. Sometimes we are given figures, sometimes not. Usually we have been treated to much generalization and few facts, or when we got the latter they were so numerous and so stupendous that we scarcely followed them. But here we have a simple statement that in September, 1907, Canada exported timber, sawn or unsawn, to the value of $5,981,590; agricultural products, $5,897,044; manufactures, $3,804,024; products of the mine, $3,341,995; fish, $1,036,478. Only one class exceeded in importance that of the forest, that was animal produce, which ran up to $7,193,159. Here we have from the most uninviting of pages, matter of the greatest interest, put up in a clear, concise manner.

Whom do we buy all our goods from? To whom do we sell them? It would surprise not a few to read the list of countries with whom we deal. Over eleven States within the British Empire; twenty-seven, exclusive of the other foreign countries whose dealings are too small to receive independent mention, without the Empire—that takes in most of the countries worth while. All this is set forth, with the amount of our purchases and sales to each individual state on another page.

But after all the most important section is that containing the detailed statements of imports and exports. What is really wanted in most cases is the amount of some particular article and the principal sources or destinations of it. This is by no means an easy work, as those know who have tried to run down any number of articles. The same article would naturally be grouped under different heads according as it was for use in different industries. A limit has to be reached somewhere in the matter of detail. However through constant changes, rearrangements and re-groupings, the report now gives a very satisfactory service in this respect. It is possible to get at the amount of exports or imports, and the countries which buy or sell them, with on the whole commendable ease. These tables, which are comparative for the years 1906 and 1907, occupy a large part of the report, and are the material for many of the condensed statements previously referred to.

Finally the report contains reports from our commercial agents abroad, which are practically the same as those issued from week to week by the department, and a valuable and well-selected mass of general commercial information. The latter deals with the trade of foreign countries with which Canada is interested.

Exhibition of Japan, 1912.

Those nations that have announced their intention to take part in, or to favorably consider, the great exhibition that Japan is organizing, are given with the official answers in the following order: 1, Germany; 2, Mexico; 3, Canada; 4, New Zealand; 5, Great Britain; 6, France; 7, the United States.

OUR NEW ZEALAND LETTER.

Wellington, Dec. 1st, 1907.

In my letter of the 1st of August I made some remarks in connection with the preferential tariff to the effect that if manufacturers are not careful and want to pocket the whole difference themselves, that they will ultimately kill the goose that lays the golden eggs. Apparently my warning has not been heeded and the consequence is that the killing of the goose has commenced already.

A certain line of apparel used mostly by the laboring classes was benefitted by the preferential tariff to the extent of 20 per cent. Gradually the Canadian price went up until the difference in the landed cost was insignificant, and in some cases there was no difference at all.

The Minister of Customs, Hon. Millar, was informed of this, and promptly took the preferential duty off, and the business is going back to the United States. Even if Canadian manufacturers reduce their prices again to the level of the foreign manufacturer the business will go past them as merchants are disgusted with the manner in which the Canadian manufacturers have appreciated a benefit which was given to them, not for the purpose of filling their own pockets but to keep the foreign manufacturer out. This is only one line, but I am informed that several others will share the same lot if matters are not mended. The Minister has made up his mind that the preference shall not be paid by the inhabitants of New Zealand, or in any case, not to the full extent.

Canadian manufacturers must bear in mind that their doings are closely watched by the agents of foreign firms, and that any aggression of this kind is promptly reported to the Minister, who then investigates, and if found correct punishes offenders by taking the preferential duty off. This is a very serious matter, and the sooner manufacturers change their policy, and do their best to deserve the preference given to them the better. If once the preferential duty has been removed it will never be put on again.

There are rumors afloat concerning a change of management of the Alley line of steamers. According to some reports Bucknall Bros. have withdrawn, and the contract with Alley will be carried out by Barrie & Sons, Dundee, who are expected to put on some of their best steamers to establish a monthly service with fixed sailing dates from either end. If true, this would be a great improvement on the old service which is bi-monthly, and with regard to sailing dates very unreliable.

If the new steamers are fitted up with refrigerator plant, enabling them to carry perishable goods, a large extension of trade can be expected.

There is a splendid prospect for the sale of British Columbia apples, but owing to the very limited refrigerator space offered by the Canadian Australian line the imports are limited. Another drawback is that such shipments have to be transhipped in Sydney.

The apples imported by the Department of Agriculture during the Christchurch Exhibition arrived in splendid condition, and being in cool storage kept for many months. Big results were expected by the Commissioners, and they would have been fully realized if the necessary refrigerator space had been available on the steamers of the Alley Line. Fijian planters also are very anxious to send their fruits in cool storage, and are willing to pay a very good rate, knowing that if their produce arrives in good condition in New Zealand they can command far better prices, and they do not run the risk of having the greater part of their shipments condemned on arrival as has been very often the case in the past.

The first steamer of the new line to leave Sydney via New Zealand to Vancouver will be, I am informed, the "Den of Ruthven." The sailing date was given as the 28th of November.

Business is getting quiet now, as is always the case at the end of the year, next month the holiday season commences and it will be far into January before the New Zealander will knuckle down to work again in earnest. I expected to be able to send you a copy of the amended laws on industrial arbitration, but as the bill is still before the house this is impossible. The proposals are in some respects very drastic, and there is some strong opposition on the part of the trade and labor councils, and it is more than probable that after the bill has finally passed it will be very much different to the original.

The New Zealand Year-book for 1907 has made its appearance. On glancing through I find that the imports from the United States have fallen off by £32,720, and those from Canada have increased by £34,152. Imports from British Columbia, which is separately mentioned, have increased by £26,817. Practically the imports from Canada increased by twice the amount the imports from the United States decreased.

This shows that Canada got the benefit of the total increase of importations from the American continent, and made a fairly large inroad on the United States imports.

When the new preferential tariff is in full operation Canada ought to benefit in an increasing measure; if she does not, it is the fault of the manufacturers for reasons pointed out above.

It will interest you to learn that the total loss on the Christchurch Exhibition has now been fixed at £21,000, or a little over $100,000.

COSMOPOLITAN.

TRADE WITH BRITISH GUIANA.

From the statistics given in the report of the Comptroller of Customs for British Guiana for the year ending March 31st last, just come to hand, it would appear that there is considerable scope for the expansion of Canadian trade in that colony. Out of total importations during 1906-7 of $8,115,862, British Guiana bought from Canada only $547,231 worth of goods, while she exported to Canada produce valued at $2,278,859 out of total exports to all countries of $7,964,546. In other words, Canada took nearly one-third of British Guiana's exports, while British Guiana purchased only one-sixteenth of her importations from Canada. Even allowing for Canadian goods entering British Guiana from United States ports, and thus credited as United States goods, the discrepancy is still enormous, and surely indicates that Canadian exporters should make a serious effort to obtain a large portion of this near-by market. It should also suggest to the merchants and people of British Guiana that they turn a little more of their business to a country which is a better customer of theirs than the United States, from whom they now purchase over one-quarter of their goods.

But Canada must not expect trade to come to her unsolicited. Canadian exporters should prepare to exploit this little known market in a vigorous manner. From the returns before us it would appear that outside of farm produce such as grains, butter, cheese, potatoes, and live animals, and fish products, the best field lies in biscuits and confectionery, boots and shoes, cordage, flour, lumber, oils and paints, soap and varnishes. The attention of manufacturers of these articles is directed to this market in the hope that they will endeavor to secure a footing in it. There is no time more opportune than the present, when financial conditions in Canada have resulted in lessening the home demand. Further information regarding the British Guiana market, with the addresses of prominent merchants in that colony, will be gladly furnished to any manufacturer applying to the Secretary.

Among the Industries

The Imperial Glove Co. have been incorporated, with a capital stock of $40,000, with chief place of business at Dundas, Ont.

The Belleville Iron and Horseshoe Co. have been incorporated with a capital of $10,000, head office to be at Belleville, Que.

The Maple Leaf Flour Mills of Kenora were formally opened recently. Guests were present from all over the Canadian West.

The Canada Tag and Label Co. have been incorporated with a capital stock of $49,000. The chief place of business will be Montreal.

The Howell Lithographing Co., of Hamilton, have issued a handsome calendar, showing the 91st Regiment of Highlanders, in full costume, on parade.

An attractive calendar has been received from Rhodes, Curry & Co., Amherst, N.S. It gives an illustration of the extensive car-building plant of that company.

The Taylor-Forbes Co., of Guelph, suffered a loss by fire recently which, while it was confined to a small area and amounted to only $2,000, threatened for a time to be disastrous.

The silicate brick factory of North Sydney, N.S., which has been lying idle for the past two years, will be running full time again shortly, if negotiations which are now on are successful.

The White Candy Co., of St. John, N.B., are considering the removal of their factory to Moncton. No definite action has yet been taken as a number of other locations are also under consideration.

The Utica Shale Pipe Co. have been incorporated with a capital stock of $20,000. W. K. Lowden, St. Lambert, Que., engineer, heads the directorate. The chief place of business is named as St. Lambert.

Enquiries have been made of the Bureau of Industries of British Columbia as to the best location for a tin-plate mill. The big canning business of the province makes such a manufacture very promising.

George E. Mills has secured the contract of building another large addition to the Hamilton Steel and Iron Company's blast furnace plant, of Hamilton, Ont. It is for a $5,000 brick machine building.

An English company are negotiating for the purchase of the Perth Flax and Cordage Co., Limited, of Stratford, Ont. The company in question are large manufacturers of twines, ropes and cordage, and in the event of their establishing a Canadian branch, they would extend the present plant of the Stratford company to double its present capacity.

The Nova Scotia Cement and Plaster Co. have been incorporated with a capital of $100,000, to manufacture gypsum, including Plaster Paris, and all articles made therefrom. The chief place of business is Toronto.

A company has been formed to build lifeboats in Canada. It will be known as the International Automatic Lifeboat Co., with a capital of $350,000. The plant will be established at one of the Maritime Province seaports.

It is announced on the authority of Mr. Rudolphe Forget that an English company is prepared to spend $10,000,000 in developing Canada's electrical railways. This sum would go to improve existing roads and to build new lines.

Seven electric locomotives will be put in commission in the St. Clair tunnel by the Grand Trunk Railway. The normal capacity of one of these engines is 750 horsepower. Two of them will make a locomotive capable of pulling a 1,000 ton train up the two per cent. tunnel grade. The trip will be made from Port Huron to Sarnia, nearly three miles, in seven minutes.

The Walbridge Manufacturing Co. have been incorporated with a capital of $20,000, for the manufacturing of tools, wood and iron working machinery, engines, boilers, water wheels, hydraulic apparatus, shaftings, hangers, couplings, pulleys and general mill supplies, stoves, furnaces and appliances and general factory work. The chief place of business will be Mystic, Que.

The Metal Shingle and Siding Company, Limited, of Preston, Montr al and Toronto, have just completed shipping six carloads of "Acorn quality" corrugated galvanized sheets for the new plant of the Great Lakes Portland Cement Co., at Port Colborne, Ontario. They have also secured the contract for supplying the same material to be used in constructing the Vulcan Portland Cement Co.'s new works at Longue Point, near Montreal.

A company to be known as the Canadian Chemical Company, is being organized. They are to take up a feature of chemical manufacturing that is said to be new not only to Canada, but to the British Empire. This is the distillation of creosote from wood tar. The erection of a wood reduction plant is now going on at Needon, on the line of the Quebec Central, where the company are to operate. Here will be made the products of the ordinary wood alcohol plant, viz., wood alcohol, coke and acetate of lime. Aside from these there is a big product of thirty gallons of tar from every cord of wood, which in many plants is consumed for fuel. Messrs. Morton, J. Lyster and Benton Lyster, of Whitefield, N.H., claim to have discovered the secret of getting from this tar creosote, guayacol, and creosote paint, all under a process by which they can be made commercially. The Messrs. Lyster are interested in this company. A factory has been successfully operated under their charge at Whitefield, where a large quantity of these by-products have been manufactured. If the company is able to use the tar as they say then can, they have a process that has been sought for by chemists for years.

Trade Enquiries

NOTE.—For further information regarding any inquiry mentioned under this heading or the names of inquiries, apply by numbers to the Secretary, at Toronto.

293 **Agency.**—A wholesale firm in **Denmark** wishes to obtain the sole agency for Scandinavia for some Canadian specialties.

294 **Agricultural Machinery and Implements.**—An importing house in the **City of Sayula, State of Jalisco, Mexico,** desires to form connections with Canadian firms prepared to supply agricultural machinery and implements.

295 **Ash Wood Legs.**—A **Yorkshire** firm makes inquiry into the prospects of securing supplies of ash wood legs for dolly washers, in sizes of 10 1-2 inches long by 1 5-8 inches in thickest parts, and one end turned to 1 inch in diameter; also for supplies of dolly handles 15 1-2 inches long by 1 3-8 inches in thickest part. Samples and any other necessary particulars supplied on application.

296 **Asbestos.**—A **Manchester** firm asks for prices of asbestos in powder, and manufactured into millboard from Canadian exporters.

297 **Boards and Planks.**—A **Manchester** firm desires to obtain prices of pitch pine boards and planks from Canadian exporters of same.

298 **Canned Meats, Shell Fish, Butter and Cheese.**—A green grocery establishment in the city of **Guadalajara, State of Jalisco, Mexico,** wishes to form connections with Canadian firms who can supply canned meats and shell fish, also butter and cheese.

299 **Canadian Oak Staves.**—An **Australian** importer of brewers' supplies is desirous of receiving particulars of and quotations for large quantities of Canadian oak staves. Prices should be quoted f.o.b. steamer, New York.

300 **Casein.**—A **London** firm of merchants and importers is open to receive large supplies of casein from Canada.

301 **Casein.**—A **London** firm of manufacturing chemists who are buyers of casein would be pleased to hear from Canadian producers of the material seeking export trade.

302 **Chair Lumber.**—An **English** firm desires to communicate with Canadian exporters of chair lumber, ready sawn.

303 **Condensed Milk.**—A **Japanese** mercantile house, importing largely in condensed milk (sweetened) for nursery consumption, wish to obtain supplies of that article from Canada. For a suitable article contract for a term may be entered into.

304 **Canned Salmon.**—A **Manchester** firm asks for prices of canned salmon (Fraser River) from Canadian packers of same.

305 **Cordage.**—A **Liverpool** firm asks for prices of cordage and twine from Canadian manufacturers.

306 **Cordage.**—A **North of England** firm is open to receive prices and other particulars from Canadian manufacturers of manilla and sisal baling cordage and similar goods.

307 **Commission Agent.**—Firm of export and import commission agents doing business with **Norway and Sweden** in **New York** are anxious to hear from Canadian firms seeking to develop export trade with those countries. References.

308 **Copper and Copper Ore.**—**Hamburg, Germany,** mine product dealer can place good orders for copper and copper ore in Canada.

309 **Bed Plates.**—Pulp and paper manufacturer in the province of **Quebec** is in the market to purchase bed plates for beating engines. Member of C.M.A.

310 **Egg Albumen.**—A **Manchester** chemical company asks for prices of egg albumen from Canadian exporters.

311 **Folding Box Board.**—Well-known **Canadian** firm is in the market to purchase folding box board in Manila or other qualities.

312 **General Agency.**—A **New Zealand** importing and exporting broker desires to handle every description of merchandise in New Zealand, and would be glad to get into communication with Canadian firms exporting wall paper, boots, rubbers, buck-wheat flour, chairs, shelf hardware, salmon and lumber.

313 **Hair.**—A **London** firm of import and export merchants is desirous of being placed in touch with tanners in Canada exporting brown body and other hair.

314 **Dowels.**—A **Leeds** firm can take supplies of dowels and other kinds of turned wood.

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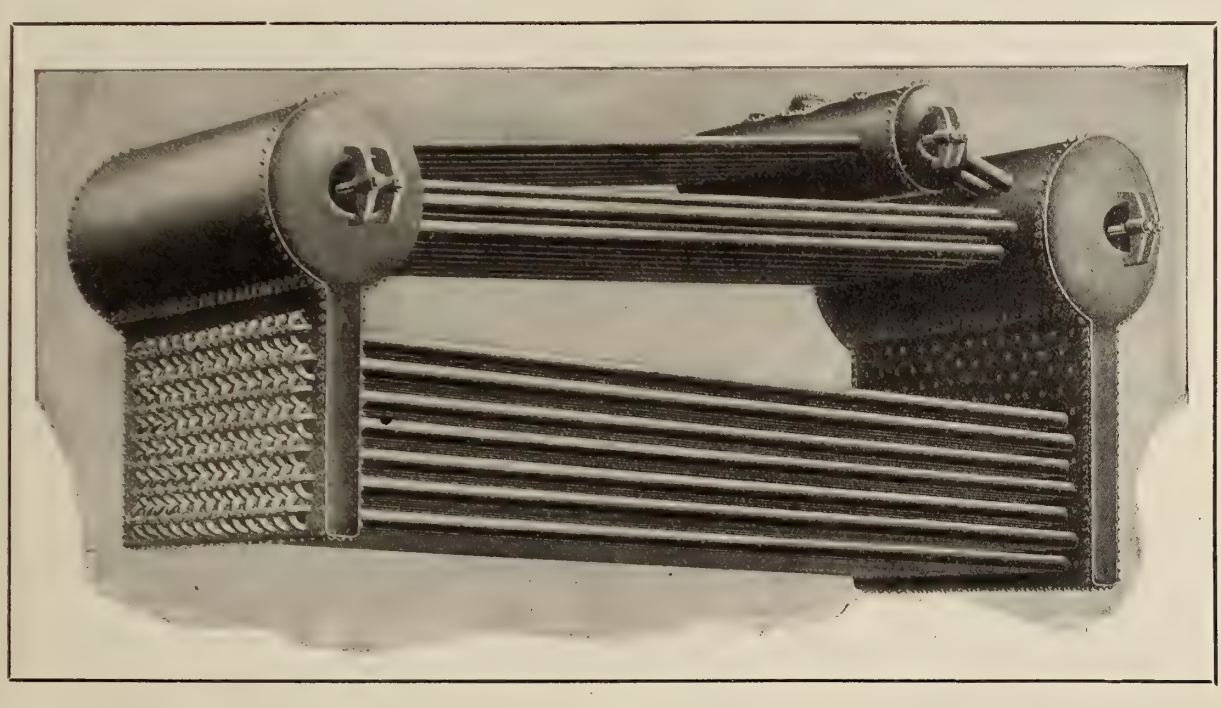
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See Bulletin No. 32

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315 **Leather.**—A leading importer of leather sole, upper, harness, etc., in one of the leading commercial centres of **Japan,** invites correspondence from exporters in Canada with a view to the business.

316 **Leather.**—An importing and exporting house in **Japan** wishes to import Canadian leather, such as sole, upper, harness, etc. Correspondence invited.

317 **Leather.—Lancashire** firm asks for prices of razor strop and suede belt leather from Canadian manufacturers.

318 **Manufacturers' Agent.**—Reliable Englishmen with considerable experience as a manufacturers' representative in **Great Britain** is anxious to hear from Canadian firms who could employ him in that capacity in Great Britain.

319 **Manufacturers' Representative.—Brussels,** Belgium, newly established firm of manufacturers' representatives is anxious to hear from Canadian firms who desire agents in that country for building timber, lumber, etc., brick and cement machinery for typewriting machines.

320 **Manufacturers' Representatives.—Sydney, Australia,** firm of manufacturers' agents would be glad to hear from Canadian firms seeking permanent representatives in that market. Particularly in rubber goods, special machinery, and any other good lines. References.

321 **Maple Blocks.**—A well-known **English** firm of bobbin manufacturers is prepared to consider prices from Canadian manufacturers who are in a position to ship large quantities of rock maple blocks to Liverpool.

322 **Oatmeal.**—A **Liverpool** firm invites correspondence from Canadian manufacturers of oatmeal and rolled oats.

323 **Office Fittings, Stationery and Rubber Stamps.—Western Canada** firm of commission agents is anxious to hear from Canadian manufacturers of the above lines who could employ them as western representatives on a commission basis. References.

324 **Patent Jack.**—The owner of a patent jack for elevating motor cars wishes to sell the patent rights for Canada, and invites correspondence in that direction.

325 **Pearl Ash.**—A **Melbourne** importer of chemicals, with branches in principal Australian and New Zealand ports, requests quotations for Canadian pearl ash f.o.b. steamer in New York.

326 **Potash.—Melbourne** importer of chemicals is anxious to receive particulars and quotations for Montreal potash to be shipped to principal Australian and New Zealand ports. Prices must be upon the basis of f.o.b. in New York.

327 **Potato Starch.**—A **Manchester** firm asks for c.i.f. prices of potato starch in two cwt. bags from Canadian manufacturers.

328 **Representative.**—British firm at **Constantinople** is desirous of taking up the sale of Canadian goods likely to be salable in Turkey.

329 **Ropes and Cordage.**—A **Durham** firm are buyers of sisal ropes and all kinds of small cordage, and asks for prices and particulars from manufacturers in Canada.

330 **Sleighs.**—A firm in **Belfast, Ireland,** wishes to obtain prices and catalogues of sleighs from Canadian manufacturers.

331 **Skeleton Carts.**—Particulars of a inquiry from **New Zealand** for **Skelton** carts may be had at this office. Shipment through a New York commission house.

332 **Talc.**—A **Manchester** firm desires to obtain prices of talc, fine ground (no other) in two cwt. bags, no charge for bags; c.i.f. Manchester; from Canadian exporters.

333 **Toboggans.**—A firm in **Belfast, Ireland,** desires to correspond with Canadian manufacturers of toboggans.

334 **Sisal Rope.**—A **Leeds** firm is open to consider prices from manufacturers in Canada of sisal rope, particularly of the finer qualities.



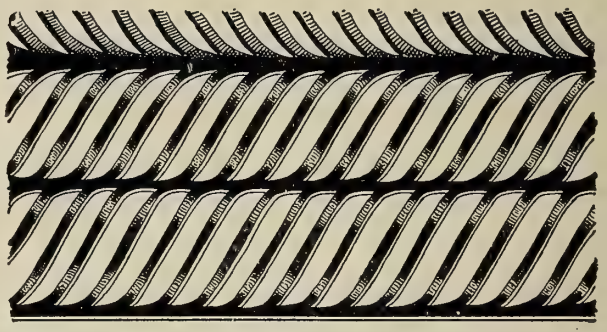
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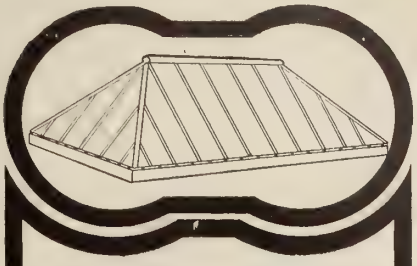
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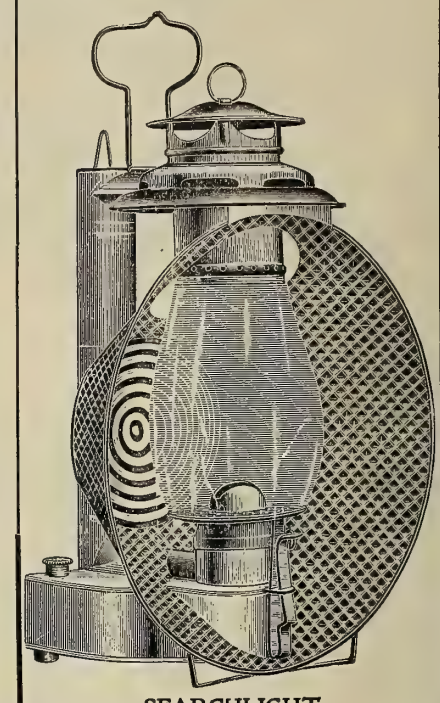
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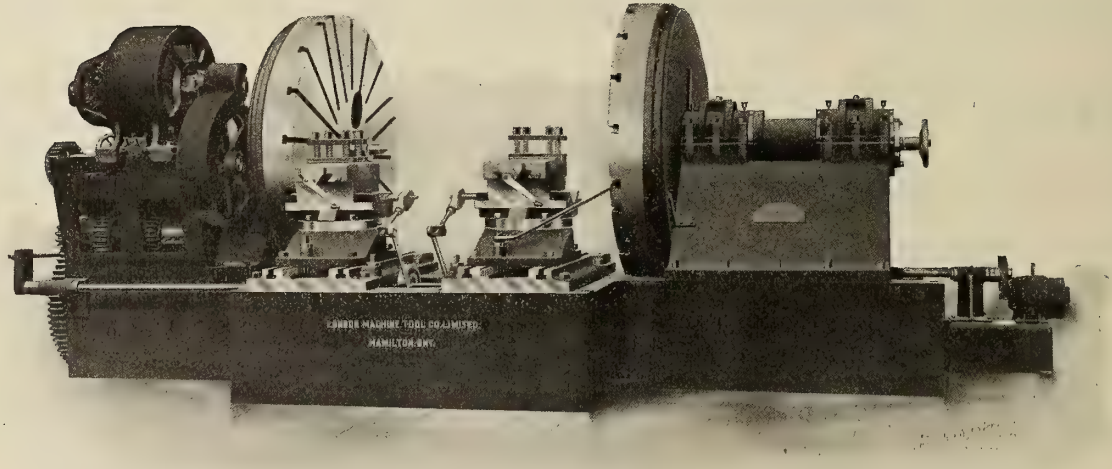
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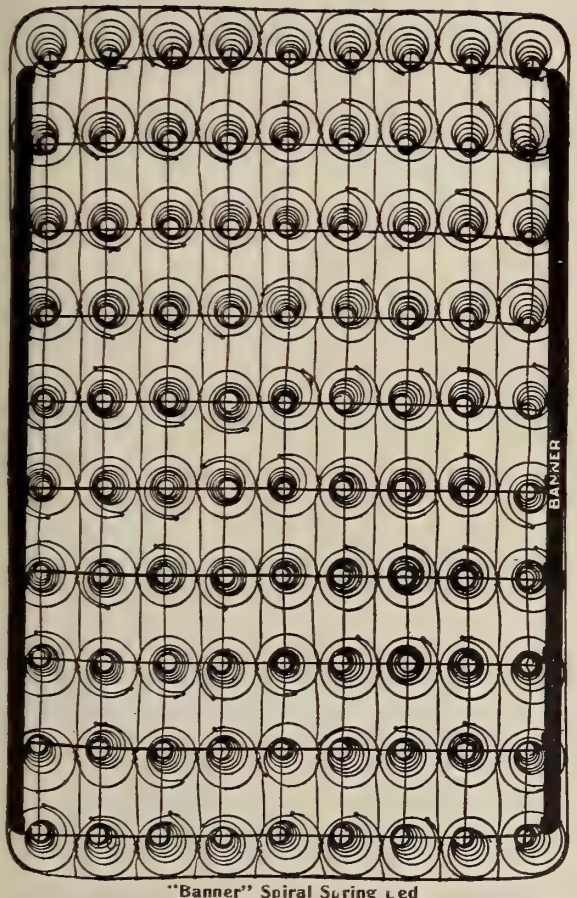
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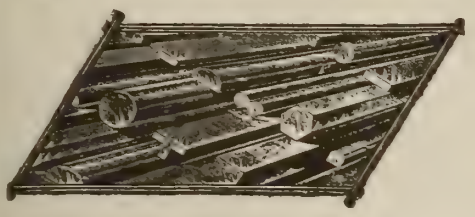
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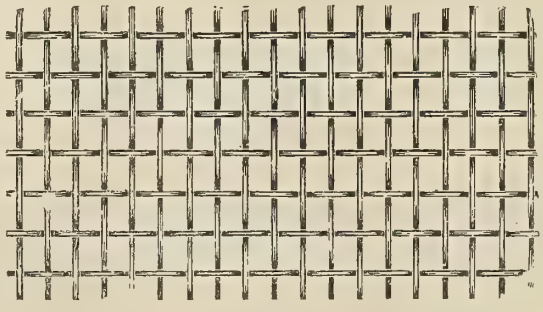
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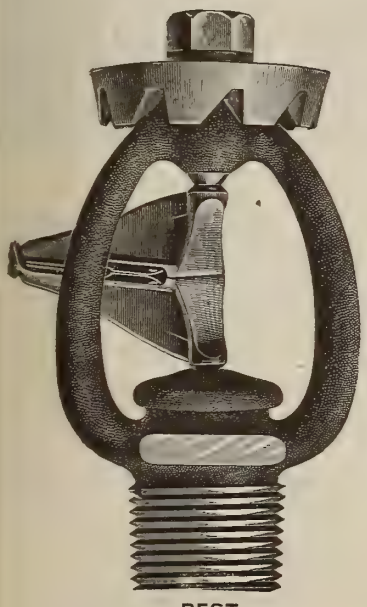
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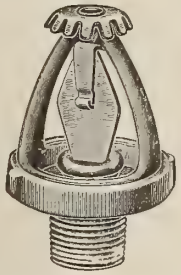
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Refiners, Smelters, Assayers
Jewelers' Sweeps, Polishings, Scrap; Book-Binders' Skewings, Silver Nitrate Wastes, Dentists' Scraps, all treated.
ASSAYS MADE BULLION SOLD
Gilders' Gold Leaf Dentists' Golds.

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THE GURNEY-TILDEN CO., Limited,
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HARDWARE
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Manufacturers and Exporters of Harness, Collars, Saddles, Horse Blankets, Trunks, Valises, Travelling Bags, Dealers in Leather, Shoe Findings, and Saddlery Hardware.

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Soil Pipe and Fittings, Steam Fittings, Stable Fixtures.
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CANADA HORSE NAIL COMPANY, Montreal
(ESTABLISHED 1865).
The largest manufacturers of Horse Nails in Canada.
REGISTERED C TRADE MARK
All nails are hot-forged from special Swedish Steel. No better quality of material or nails in the world.
Telegram Code—"Western Union." Address—"Adanac."

HORSE NAILS

THE CAPEWELL HORSE NAIL CO.,
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The largest manufacturers of horse nails in the world. Best material, best process, best nails. Samples, prices, catalogue, and 1907 calendar free on application. We ship promptly and anywhere. Western Union code.

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Established 1840. **TORONTO.**
Manufacturers of Rings, Brooches, Watch Chains, Medals, Class Pins, Lockets, Cuff Links, and Fine Diamond and Pearl Jewellery.

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Label Manufacturers—Varnished, Embossed or plain Labels for all purposes.

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CLARKE & CLARKE, Limited,
(Established 1852.) **TORONTO, CANADA.**
Leather Manufacturers—Colored Sheepskins, Glazed Sheep Kid, Napa Button Fly, Bookbinders' and Fancy Leather, Skivers, Fleshes, Russets, Velvet Art Leather, and Spanish Furniture Roans.
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(Estab. 1852.) **TORONTO, CAN.**
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Quebec Agency—492 St. Valier St.
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Mill at Petit Pre, Ange-Gardien, P.Q.
Factory and Office, 159-161 Arago St., Quebec
Manufacturers of Leather Board, Friction and Fibre Board, and Leather Board Counters; also all grades of Rubber Cement for the Boot and Shoe Manufacturers.
Prices on Application

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Formerly
Rolph, Smith & Co. Clark Lithographic Co.
Artistic Lithographers, Engravers, and Printers
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Lithographers and Engravers by all processes. Manufacturers of High-Class Advertising Novelties. Map Engravers and Fine Art Printers, etc., etc.

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THE JEFFREY MFG. CO.
Canadian Branch } **MONTREAL**
Makers of Link Belting, Steel Chains, Elevators, Conveyers, for handling Material of all kinds
CATALOGUES FREE

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McARTHUR, CORNEILLE & CO.,
MONTREAL.
Linseed, Cotton Seed, Olive and Castor Oils; Neatsfoot, Sperm, Seal, Whale and Cod Oils; also Mineral Oils and Greases of all sorts.

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Manufacturers of Plain and Printed Linoleums and Oil Cloths of every description. Floor Oil Cloths, Table Oil Cloth, Carriage Oil Cloth, Enamelled Oil Cloth, Stair Oil Cloth, etc.
Decorative Burlaps, double sized and oil coated.

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THE BELL PIANO & ORGAN CO., Ltd.,
GUELPH, ONT.
Manufacturers of High-Grade Upright and Grand Pianos, Reeds Organs, and Automatic Piano and Organ Players.
Branches at 49 Holburn Viaduct. London, E.C.: 15 Bridge St., Sydney, N.S.W.

W. DOHERTY & CO.,
CLINTON, Canada, and LIVERPOOL.
ESTABLISHED 1875.
Manufacturers of
High-Grade PIANOS and ORGANS.

GODERICH ORGAN CO.,
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Manufacturers of High-Grade, Fine Tone Reed Organs, Piano Stools, Music Cabinets, Office Desks, Closet Seats. For export and home trade.
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Manufacturer of Paints, ground in Oil, Water, and Japan. Putty, Varnishes, Japans, Enamels, Builders', Manufacturers' and Painters' Supplies. Importer of Creosote Shingle Stains, Deafening Quilt, &c., &c.

BRANDRAM-HENDERSON, LIMITED
MONTREAL, HALIFAX,
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White Lead, Color, Paint and Varnish Manufacturers.

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Makers of Permanent Reds, Greens, and Yellows, Carriage Varnishes, Wagon Varnishes, Furniture Varnishes, Japans, Finest Ground Colors in Oil or Japan.
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THE IMPERIAL VARNISH & COLOR CO., Limited, TORONTO.
Manufacturers of Fine Varnishes, Japans, Enamels, etc.

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MONTREAL.
Manufacture Paints, Varnishes, etc.
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Largest Paint and Varnish Makers in the World.
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The Best Wall Finish **MURESCO** The Best Wall Finish
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Merritton Mill—News Paper, Hanging Paper, Wrapping Paper and Building Paper, and Sulphite Pulp.
Hawkesbury Mill—Sulphite Pulp.

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Makers of Super Book.
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Colored Flats and Linen Ledgers.

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RIDOUT & MAYBEE,
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Manufacturing Pharmacists and Biologists.
Laboratories and General Offices, WALKERVILLE, ONT.
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THE BELL PIANO & ORGAN CO., Ltd.,
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Manufacturers of High-Grade Reed Organs, Upright and Grand Pianos, and Automatic Piano and Organ Players.
Branches at 49 Holborn Viaduct, London, E.C., 15 Bridge St., Sydney, N.S.W.

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Manufacturers of High-Grade Grand and Upright Pianofortes.

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MICA BOILER COVERING CO., Limited,
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Sole Manufacturers of Mica Coverings for Steam, Hot and Cold Water Pipes, Boilers, Flues, etc, Refrigerating Plants, Dealers in Engineers' Supplies.

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Plows—Walking, Gang, Sulky. For Canadian and Foreign Trade.
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Babbitt Metal, Lead Pipe, Lead Traps, Lead Shot, Colors in Oil, Colors in Japan; Putty, Ready Mixed Paints, White Lead, Metals, Painters' and Plumbers' Supplies, Saws and Varnishes.

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General Office, 59 Richmond St. East,
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THE MILN-BINGHAM PRINTING CO.,
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Steam and Power Pumps of every description for all services.

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Catalogue on application.
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Sovereign Radiators for Hot Water or Steam Heating.
Prices on application.
—We also make Hot Water Boilers. —

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Wheel and Drag Scrapers.
Railroad Ploughs, all kinds.
Railroad Dump Carts, 1½ yds. to 10 yds. capacity.
Dump Carts and Dump Wagons.
Wheelbarrows and Trucks, every description.
Prompt Delivery. "ALL CANADIAN MADE."

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THE PARMENTER & BULLOCH CO., Ltd.
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Iron and Copper Rivets, Iron and Copper Burrs, Bifurcated and Tubular Rivets, Wire Nails, Copper and Steel Boat and Canoe Nails, Escutcheon Pins, Leather Shoe and Overshoe Buckles, Bit Braces, Felloe Plates.

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Sole makers of the Celebrated **"Canadian" Rubbers,** for over 50 years the inspiration of the trade for "Looks" and "Wear." Special attention given to the Export trade.

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THE CANADIAN RUBBER CO. OF MONTREAL.
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Manufacturers of all kinds of High-Grade Mechanical Rubber Goods, Belting, Hose Packing, Light Mechanical and Moulded Rubber Goods, Druggists' Sundries.

THE GUTTA PERCHA AND RUBBER MFG. CO. OF TORONTO, Ltd.
Manufacturers of all kinds of Rubber Goods for Mechanical Purposes, Rubber Belting, Packing, Water Hose, Steam Hose, Air Drill Hose, Brewers Hose, "Maltese Cross" Carbolized Rubber Fire Hose, Solid and Pneumatic Tires.

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SAWS.
If the Maple Leaf is on your Saw, it is a guarantee that you have the best.
Manufactured only by
SHURLEY & DIETRICH,
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Manufacturers of Sawmill Machinery, and Water Wheels, Mining and Pulp Mill Machinery, Engines and Boilers, Transmission Machinery.

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THE GURNEY SCALE CO.,
Established 1856.
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Manufacturers of Standard Scales and Trucks.

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THE CANADA SCREW CO.,
HAMILTON.
Wood Screws, Wire, in coils and straight lengths, Wire Nails, Stove and Tire Bolts, Rivets, Machine Screws, Nuts, Burrs, Bright Wire Goods, etc..

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THE STANDARD SHIRT CO., Limited,
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Manufacturers of Shirts, Collars, Cuffs, Overalls, etc.

The **WILLIAMS, GREENE & ROME CO.,**
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Manufacturers of
SHIRTS AND COLLARS.

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Goodyear Welts Exclusively.
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ILLUMINATED SIGNS, &c.

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Manufacturers of Table and Hollow Ware, Enamelled Belt Buckles, Brooches and Novelties, Medals, Badges and College Pins. Staple Silverware of all classes.

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TORONTO FOUNDRY CO., Limited,
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Manufacturers of Soil Pipe and Fittings, Sinks and Boiler Stands. Telephone, Park 335.

WARDEN, KING & SON, Limited,
Manufacturers,
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"Daisy" Hot Water Heater. "Gem" Hot Water Heater. "Gem" Steam Heater. "Daisy" Bath Heater.
Send for Catalogue.

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Steel Stamps and Die Sinking
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G. Gomm, Sec.-Treas.
Die Sinkers and Manufacturers of Steel Stamps, Steel Letters and Figures etc. Canadian Agents for the BRADLEY STENCIL MACHINE.
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NATIONAL STOVES
Are the latest in style and practical improvements for hard coal, soft coal or wood.

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Manufacturers of Tents, Awnings, Flags, Sails, Waterproof Covers, Clothing, Coal Bags, Life Belts, Life Buoys and every description of Camping Goods. Tents and Camping Outfits to rent.

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Separators, Clover Hullers and Attachments of all kinds, Threshing Engines, Traction and Portable, Sweep and Tread Powers. Portable Saw Mills and Saw Mill Engines. Roadmaking Machinery, Graders, Scrapers, Rollers, etc.

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Manufacturers of Travelling Requisites of every description.
Steel Commercial Trunks a specialty.

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Trunks and Travelling Bags, Telescope Cases, Suit Cases, etc. Steel Sample Cases.

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Sole dealers in "Underwood" Typewriters; also all other makes, new and second-hand; manufacturers of Neostyle Duplicating Machines and supplies. Write for price list.

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THE IMPERIAL VARNISH & COLOR CO., Limited, TORONTO
Manufacturers of
Varnishes, Japans, Fillers, Paints,
Enamels, Stains, etc., for all uses.

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The WILKINSON PLOUGH CO., Ltd.,
TORONTO, Canada.
Wagons, a full line.
The West Lorne Wagon Co. controlled by The Wilkinson Plough Co., Ltd.
Prices on application.

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THE AMERICAN WATCH CASE CO., LTD., TORONTO, CANADA.
Largest Watch Case Factory in the British Empire. Manufacturers of Gold, Silver, Gold-filled and Nickel Watch Cases of every style and size. Goods marketed exclusively through the wholesale trade. Correspondence solicited.

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BECHTELS LIMITED
Manufacturers of the SIMPLICITY line of
Wire Cut Brick Machinery
Capacities up to 100,000 per day. Perfect Carless Brick and Tile Driers.
Wheel Scrapers Barrows, etc.

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Manufacturers of
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Manufacturers of
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32 St. Sulpice St. - - - MONTREAL
Factory - - LACHINE.

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Galvanized Steel Pumping and Power Windmills, Gas and Gasoline Engines, Grain Grinders, Iron and Wood Pumps, Tanks, Water Supplies, Custom Galvanizing.
Automatic Concrete Mixers.

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WINDMILLS, PUMPS, GASOLINE ENGINES, TANKS AND SUBSTRUCTURES, WATER SUPPLY APPLIANCES, GALVANIZING.

WIRE CLOTH

C. H. JOHNSON & SONS,
Limited
St. Henry, Montreal
WIRE CLOTH

WIRE WORK

THE GEO. B. MEADOWS TORONTO WIRE, IRON. AND BRASS WORKS CO., Limited, TORONTO, ONT.

Established 1854. Office, 479 Wellington St. W.

Wire Cloth, Wire Work, Ornamental Wrought Iron Work, Fencing, Bank and Office Railings, Window Fixtures, Elevator Guards, Mining Scre ns, Riddles.

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Wool—Domestic and Foreign.
Cotton and Cotton Warps.

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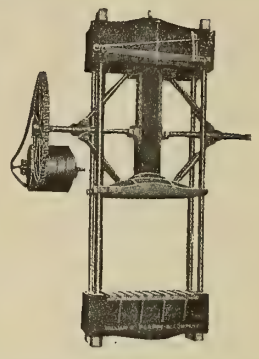
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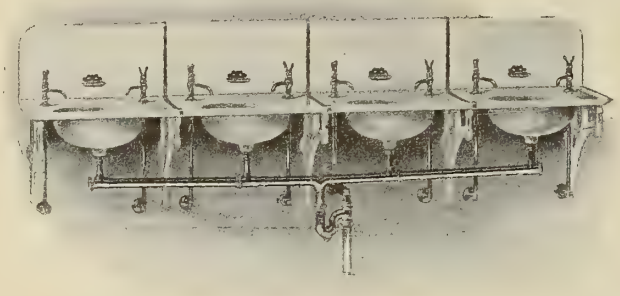
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Correspondence Invited.

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Porcelain Enameled Ware

Made in Canada this ware is the equal of any foreign product of a like nature.

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The Standard Ideal Company, Ltd.

Head Offices and Factories:

PORT HOPE, ONT.

Sales Offices and Sample Rooms:

TORONTO: 50 Colborne Street
MONTREAL: 128 West Craig Street
WINNIPEG: 156 Lombard Street

Executive Council

DECEMBER MEETING.

The regular monthly meeting of the Executive Council was held in the Board of Trade rooms, Ottawa, on Thursday, December 5th, at 3 p.m.

The President, Hon. J. D. Rolland, occupied the chair. Other members present being Messrs. H. W. Aird, Montreal; Joseph Allen, Montreal; John Baillie, Montreal; C. C. Ballantyne, Montreal; G. Frank Beer, Toronto; Fred. Birks, Montreal; Geo. Booth, Toronto; Geo. Brigden, Toronto; P. H. Burton, Toronto; J. C. Casavant, St. Hyacinthe; Wm. Cauldwell, Montreal; W. B. Champ, Hamilton; Jas. Davidson, Montreal; J. S. N. Dougall, Montreal; W. R. Dunn, Hamilton; John F. Ellis, Toronto; S. W. Ewing, Montreal; J. D. Flavelle, Lindsay; Atwell Fleming, Toronto; G. W. Ganong, St. Stephen; W. M. Gartshore, London; W. K. George, Toronto; T. S. Hetherington, Quebec; R. Hobson, Hamilton; Jos. Horsfall, Montreal; Alfred Jephcott, Toronto; J. J. McGill, Montreal; J. B. MacLean, Toronto; W. K. McNaught, Toronto; D. Murphy, Ottawa; Wm. Robins, Walkerville; A. S. Rogers, Toronto; B. Rosamond, Almonte; W. H. Rowley, Hull; J. H. Sherrard, Montreal; T. H. Smallman, London; Chas. A. Smart, Montreal; G. A. Vandry, Quebec; R. H. Whyte, Smith's Falls; R. C. Wilkins, Montreal; C. C. L. Wilson, Ingersoll; R. J. Younge, Montreal.

The minutes of the November meeting as published in INDUSTRIAL CANADA were taken as read.

COMMUNICATIONS.

The Secretary reported the receipt of an invitation from the National Civic Federation inviting him to be present at their annual meeting to be held in New York on December 17th, and to speak on the Industrial Disputes Investigation Act from the employers' point of view.

Moved by Mr. Robins, seconded by Mr. Rowley, that as the invitation could only be regarded as a compliment to the Association the Secretary be instructed to accept same, and to consult with the Parliamentary Committee regarding the views he should express on the subject upon which he was asked to speak. Carried.

TREASURER.

The Treasurer, Mr. Geo. Booth, presented his statement of receipts and disbursements for the month ending November, which showed a balance to the Association's credit of $15,234.81. There being no discussion the report was adopted.

INTER-IMPERIAL NEWS SERVICE.

On behalf of the committee appointed at the November meeting to consider the advisability of endorsing the resolution of the Vancouver and Victoria Boards of Trade in the matter of an Inter-Imperial News Agency, Col. MacLean reported as follows:

A meeting of the special committee appointed by the Executive Council to consider the advisability of encouraging the establishment of an Inter-Imperial News Agency was held in Toronto on November 26th.

The resolution of the Vancouver Board of Trade was read and thoroughly discussed. While your committee are prepared to recommend that the Executive Council should in a general way express sympathy with the proposal, as one intended to draw the different parts of the Empire more closely together, they believe the subject might better be left for the Canadian Press Association to deal with. It so happens that the latter Association will shortly celebrate its fiftieth anniversary by a gathering at which publishers from all parts of Canada are expected to be present. The renewal of the Government's subsidy to the Canadian Associated Press will then come up for consideration, and as the proposition of the Vancouver Board of Trade necessarily involves Government support it may well be disposed of at the same time.

In response to requests for more information, Col. MacLean reviewed briefly the operations of the American Press Association, showing how a great deal of the British news which came to us was first filtered through United States channels. Exception had been taken to this method from time to time by prominent newspaper men, until now there seemed to be an organized movement to secure Government support towards an Imperial service that would operate entirely independently of the American Press Association.

The subsidy granted by the Government to the Canadian Associated Press was something like $15,000 for the first year but had since been decreasing on a sliding scale until now it amounted only to about $5,000. Two men were constantly employed in London for the purpose of forwarding such news as seemed to them might be of interest to Canadian readers, and for this service Canadian papers paid from $100 to $500 per year each.

Criticism was being found with the service on the ground that it was not broad enough as applied to the United Kingdom, and from other quarters criticism was being made that the service ought to be similarly extended to other parts of the Empire.

Col. MacLean pointed out that the Government might very well encourage the movement by bearing a portion of the expense of transmitting news cablegrams. The papers individually could not afford to do more than they were doing, but the cost would be comparatively trifling to the Government, and would no doubt prove to be a potent factor in bringing all parts of the Empire more closely together.

Moved by Col. MacLean, seconded by Mr. J. S. N. Dougall, that the Secretary be instructed to inform the Vancouver and Victoria Boards of Trade that the Association was cordially in sympathy with their desire to improve the news service, and that it was asking the Canadian Press Association at its annual meeting in February to consider the proposal and, if they could see their way clear, to support it. Carried.

Moved by Mr. Younge, seconded by Mr. McGill, that the special committee be continued in office for the purpose of reporting progress to the Executive Council after their conference with the Press Association. Carried.

FINANCE.

In the absence of the vice-chairman, Mr. Tindall, the report of the Finance Committee was read by the Treasurer. It recommended for payment a number of accounts, amounting in all to $726.80, and suggested that in view of the long period that would intervene before the January meeting, the committee be empowered to pass the balance of the regular monthly accounts at the usual time.

The report also recommended the re-engagement of Mr. J. E. Walsh, as Manager of the Transportation Department, at a salary to be fixed after consultation with the Railway and Transportation Committee.

The adoption of the report moved by Mr. Booth, seconded by Mr. J. F. Ellis, was carried.

COMMERCIAL INTELLIGENCE.

The report of the Commercial Intelligence Committee was presented by the Secretary. The following are among the matters dealt with:

Duties on Exhibits.

Your Committee has recently had its attention directed to the fact that exhibits of Canadian firms sent to United States exhibitions have to pay duty at the usual rate on crossing the border, whereas United States manufacturers can exhibit their products at Canadian expositions in bond. While the number of Canadian firms affected by the United States regulations is comparatively few, it is felt that the United States authorities should be urged to make similar concessions, and your Committee will act with a view to securing reciprocal treatment in this matter.

Consuls' Fees.

Complaints having been received that the fees of American Consuls for passing shipments for United States points are unreasonable, your Committee is making an investigation into this question with a view to taking the matter up with the Government if deemed advisable.

Commercial Agent in West Indies.

From statements which have appeared in the press, your Committee has reason to believe that the Canadian Government will adopt the suggestion of the Association, and appoint a travelling commercial agent for the whole of the West Indies who will devote his entire time to the promotion of trade between the Islands and Canada.

Translations and Commercial Reports.

Since the last meeting of the Council leaflets advertising the new translation and commercial report facilities of the Association have been sent to all the members. The results already prove that these departments will be of great usefulness.

The adoption of the report, moved by Mr. Hobson, and seconded by Mr. Whyte, was carried.

RAILWAY AND TRANSPORTATION.

The Chairman, Mr. W. R. Dunn, read the report of the Railway and Transportation Committee, the most important paragraphs of which were as follows:

Readjustment of Rates.

The Department reports the receipt of an order from the Railway Commission directing that the revised tariffs of freight tolls referred to in the order of the Board dated July 6, 1907, go into force not later than January 1, 1908. The attention of the Commission was called to the fact that the railways had put in effect the winter rates on November 15, notwithstanding the order of the Board requiring a general reduction. We have, therefore, asked that the Board order a continuance of the summer rates until the new rates become effective. We have not yet been advised as to what action has been taken.

Rates to the Northwest.

The Department reports receipt of advice that the above rates will not become effective until December 15.

Re-organization of the Board of Railway Commissioners.

A delegation was arranged to wait upon the Premier and the Minister of Railways and Canals in regard to the re-organization of the Board of Railway Commissioners, in accordance with the resolution passed at the last meeting of the Executive Council. The delegation was favorably received and every consideration promised to the views set forth.

Enquiry was made by Mr. Rowley regarding the proposed amendment to the Railway Act, whether or not it would require the railways to advertise more widely than they do at present the new freight tariffs which they issue from time to time. Mr. Walsh explained the present method of displaying these new tariffs in the various freight offices of the railways, but Mr. Rowley thought that notices of all advances in rates should be printed and distributed generally to shippers likely to be affected. To this Mr. Walsh replied that the amendment contemplated forcing the railways to give public notice of all advances in rates through the medium of the press.

Several suggestions were made, looking to an improvement in the method whereby shippers were informed of advancing rates, after which it was moved by Mr. Cauldwell, seconded by Mr. Rogers, that the matter be left in the hands of the Manager of the Department for him to make such arrangements as he could with the railway companies to be supplied with their new tariffs as issued, and then to publish such portion of same in INDUSTRIAL CANADA as he might see fit; failing to secure a promise from the railways that they would supply the tariffs, the Manager of the Department to be instructed to bring the matter up again for the consideration of the Committee. Carried.

The report of the committee was on motion of Mr. Dunn, seconded by Mr. Flavelle, regularly adopted.

TARIFF.

The report of the Tariff Committee was read by the Secretary as follows:

Leeway in Dumping Regulations.

In compliance with instructions given the Committee by the Executive Council in November, the bridge builders and representative boiler manufacturers have been communicated with to ascertain what objections, if any, they would offer to the proposal to abolish the 5 per cent. leeway allowed in the case of iron and steel products. It is quite apparent, both from the correspondence and from the personal representations of some bridge builders who appeared before the Committee, that strong opposition will be raised, first, on account of the endless disputes with customs officers to which the abolition of the leeway would give rise, and second, on account of the inability of Canadian rolling mills to supply certain classes of iron and steel material. Your Committee feel that the question is surrounded with too many technical difficulties to enable them to bring in a recommendation upon it, and they would therefore respectfully refer it back to the Council.

As regards the leeway of 7½ per cent. allowed in the case of articles other than those of iron and steel, your committee are inclined to believe that its abolition would meet with general favor, but as certain individual interests might here, too, be injuriously affected they prefer to make no recommendation, but to have the matter discussed in Council.

Establishment of Tariff Department.

Careful consideration has been given to the establishment in connection with the Association of a Tariff Department under the management of an expert tariff officer, whose time will be devoted to the investigation, on a thoroughly scientific basis, of all complaints of inadequate protection. While much good might be expected to result from the establishment of such a department, providing the responsibility of recommend-

ing changes in the tariff were left to independent commission, your Committee be'ieve that until the Government appoints such a commission the efforts of the Association would be largely wasted.

It is recommended, therefore, that strong representations be made to the Government at once, favoring the appointment of a permanent Tariff Commission, and that as soon as the Government accedes to our request in this matter the Committee be instructed to take prompt steps towards securing the services of a tariff officer.

Woollen Section.

Further complaints having been received from the Woollen Section that their industry is in need of immediate attention at the hands of the Government, it is recommended that the Association place itself on record as follows:

> That this Association is deeply impressed with the deplorable condition of the woollen industry of Canada, which it believes to be threatened with speedy and total extinction unless some relief be promptly given; it therefore strongly urges the Government to give its immediate consideration to the matter, to the end that a very important industry may be preserved to the country.

Franco-Canadian Treaty.

Owing to the fact that the new French treaty has only recently been made public, your Committee regret to have to state that they are not in a position to make any report. They do feel, however, in order that the French preference may be restricted absolutely to the class of goods to which it is intended to apply, that Government stamps should first be affixed to all shipments entitled to the benefit of same.

Discussing the leeway in the Dumping Regulations Mr. Younge stated that while the Council might be willing to allow the 5 per cent. leeway to stand until the interests affected could be gotten together and reconciled, he thought it very important that prompt steps should be taken to have the Government disallow the 7½ per cent. leeway provided in the case of articles other than those of iron and steel. He therefore moved, seconded by Mr. Beer, that the Association press for the abolition of the 7½ per cent. clause immediately.

Mr. J. F. Ellis was opposed to making any recommendations until such time as the Association could ask for the abolition of all leeways, for the reason that it might appear inconsistent to ask for it in one case and to allow it to stand in another.

Mr. McNaught pointed out that the leeway regulations were subject to modification at any time by Order-in-Council, and expressed the belief that the Government would gladly meet the wishes of the Association in the matter if a strong stand were taken.

Mr. Robins expressed the belief that the Association should also press for the abolition of the 5 per cent. clause, on the grounds that we should resist to the utmost the slightest attempt to slaughter United States goods in Canada during the present industrial depression.

Mr. Wilkins reminded the meeting that the predictions of the Tariff Committee regarding times of depression were now beginning to come true; that it was not a time for latitude of any kind, but that the Association should insist on keeping up all possible bars to foreign-made goods.

Mr. Rowley recalled the fact that the United States did not reciprocate in the matter of a dumping leeway, and he saw no reason why Canada should grant favors when she was given none.

The President stated that it had been agreed by the iron and steel men present at the meeting of the Tariff Committee that they would get together at an early date and endeavor to adjust their differences, and that for this reason it was inadvisable for the Executive to press for any immediate change in the regulation affecting them.

After further discussion by Mr. Ellis, Mr. Ewing and Mr. Whyte, Mr. Younge's motion was put and carried.

The second paragraph recommending the establishment of a Tariff Department was also adopted.

The resolution regarding the woollen industry provoked a long discussion. The Committee had at first been prepared to recommend certain specific forms of redress for the woollen industry including (1) the elimination of the words "soluble in water" from item No. 203 of the tariff, (2) the modification of item No. 468 so as to permit of the importation of winding machinery at the lower rate of duty, and (3) the maintenance of a strong protective tariff on printed yarns.

Mr. Horsfall, however, pointed out that it would simply weaken the case of the woollen men if the Government were asked for what would after all be only trifles. What the industry required was 10 per cent. more protection all around, and unless it received it it would have to go to the wall sooner or later.

Mr. Wilkins, on behalf of the users of woollen goods, spoke strongly in favor of according them increased protection. Generally speaking he had found the cheaper class of English woollens absolutely unreliable, whereas Canadian woollens though costing a little more, wore more than twice as long. On motion of Mr. Robins these specific recommendations were replaced by the general resolution appearing above.

In response to some further remarks by Mr. Horsfall, who claimed that the Association had never properly looked after the interests of the woollen men, Mr. McNaught, as Chairman of the Tariff Committee for four successive years, stated that in his opinion the Association had gone to the Government in the interests of the woollen industry more frequently and expressed itself more clearly than in the case of any other trade. He strongly supported Mr. Robins' amendment incorporated above, which on a vote having been taken was declared carried.

The adoption of the entire report as moved by Mr. Ellis, and seconded by Mr. McNaught, was then carried.

RECEPTION AND MEMBERSHIP.

The Chairman, Mr. G. Frank Beer, read the report of the Reception and Membership Committee which recommended for acceptance the following applications:

New Members.

HAILEYBURY, ONT.

Haileybury Brick and Tile Co., Limited.—Brick and tile.

HAMILTON, ONT.

The Canadian Shovel & Tool Co., Limited.—Shovels, spades, scoops.

HORNINGS MILLS, ONT.

R. U. Irwin & Son.—Skewers, broom handles, lumber, hoops, children's school boxes.

QUEBEC, QUE.

Walter Sharpe.—Cement.

St. Lawrence Paper Bag Co.—Paper bags.

THETFORD MINES, QUE.

Bell Asbestos Mines.—Asbestos.

TORONTO, ONT.

McCann-Knox Milling Co., Limited.—Cereals of all kinds, flour, feed, etc.

Pratt Food Co., of Canada, Limited.—Veterinary remedies

TORONTO JUNCTION, ONT.

Dominion Brush & Mirror Co., Limited.—Toilet brushes and combination sets, hand mirrors.

The Giant Mfg. Co., Limited.—Varnishes, lubricating oils.

WIARTON, ONT.

Colonial Portland Cement Co., Limited.—Cement.

Hamilton Dinner.

The Committee was pleased to report the receipt of word from the Hamilton members to the effect that they would be glad to co-operate in the holding of a dinner in that city in the month of January, and in order to ensure as large an attendance as possible it was recommended that the next meeting of the Council be held in the city of Hamilton on January 16th, and that the dinner take place the same evening.

Emblem for Members' Stationery.

The Committee had for some time been considering the suggestion of adopting an emblem for use by members of the Association on their stationery, whereby they would advertise their membership among all those with whom they might be in correspondence. Sample designs were laid before the meeting, and after the views of a large number of those present had been received, the Committee were empowered to select a design which would be a modification of one of those submitted, and which would embody certain features more acceptable to the Council.

The adoption of the report moved by Mr. Beer, seconded by Mr. Fleming, was then carried.

INSURANCE.

The report of the Insurance Committee as presented by the Chairman, Mr. Alfred Jephcott, was regularly adopted.

It read as follows:

The Mutual Fire Insurance Companies having now completed their independent organization, the Department is free to develop the plans approved by the Council in respect to the general work of policy examinations, inspections and so forth. During the past three or four weeks it has become quite evident that there is a large amount of important work to be done on the lines laid down by the Committee when the time is opportune to secure it; meanwhile, the Department Manager is doing all the work it is possible for any one man to do.

It will interest the Council to know that the Department now has twenty-four triennial contracts for the examination and supervision of policies, aggregating over five million dollars of insurance with a guaranteed income of over one thousand dollars per annum, and it is gratifying to record that eight of these have been added in the month of November, totalling $1,648,000 of insurance with an income of $305.00. The Committee is of the opinion that this phase of the Department's work can be largely developed to the advantage of the members of the Association.

Another important section of the work is found in the arrangement and supervision of contracts for the installation of automatic sprinklers, and five contracts involving an outlay of over $35,000 have been entered into on behalf of members. One is just completed and the Department fee paid to the Treasurer; four are in progress, and require constant watching, and it will be evident that this work alone occupies much of the time of the Manager of the Department. The financial stringency has temporarily checked the growth of this particular business, but on a return to normal conditions we believe there will be an increasing demand upon the Department in the arrangement of contracts for this unsurpassed method of fire extinguishing.

Within the last few days a serious accident occurred at the factory of one of our members owing to the collapse of a tower and tank used in connection with the sprinkler system. In view of the importance of the incident the Manager was instructed to make a thorough and careful study and examination of the structure with a view to ascertaining the cause of the disaster and profiting by any lessons it might teach. To assist in more clearly establishing its cause the Committee sanctioned the employment of a consulting engineer of Toronto, and a report will be presented in due course. Meanwhile, as the contractors and the firm whose property was seriously damaged are both members of the Association, the Committee do not feel warranted in going into any further particulars at the present time.

At the July meeting of the Committee permission was given to the Manager of the Department to become a member of the Advisory Committee of the Ottawa Insurance Company in connection with the issue of a profit-sharing policy, the plan proposed being one that was felt to be in the direction of further relief from the existing high rates. This recommendation should have been reported to the Council for ratification at the succeeding meeting, but was inadvertently omitted.

Complaint has now been made to the Committee that the firm of agents in Toronto controlling the Ottawa Insurance Company, and issuing the profit-sharing policy, are circularizing the manufacturers in a manner that connects the Association with the private enterprise of the firm in question, and that is calculated to convey an erroneous impression of the meaning and support granted by the Committee to the particular class of policy. Steps have been taken to at once put a stop to the issuance of any literature that is not confined to the scope of the Committee's action, and we believe we may be safely trusted to fully safeguard the interest of the Association in this matter.

The recommendation of the Committee that the Manager of the Department be permitted to sit on the Advisory Committee of the Ottawa Insurance Company in connection with the profit-sharing policy is now before the Council for their approval.

"INDUSTRIAL CANADA."

In the absence of the Chairman the report of the INDUSTRIAL CANADA Committee was presented by Mr. Geo. Brigden. Taking up the suggestion passed on to it by the Commercial Intelligence Committee that it should superintend the issue of a new edition of the *Canadian Trade Index*, the Committee after careful consideration recommended that the issuance of a Trade Index, as such, be discontinued, and that for the future the Association publish once every year in INDUSTRIAL CANADA a classified directory of its membership. Several advantages were claimed for this plan, among which it is sufficient to mention that it would be the means of effecting a material saving, and at the same time give the membership the benefit of more frequent classification.

The adoption of the report, moved by Mr. Brigden, seconded by Mr. Younge, was carried.

BRITISH OFFICE.

The report of the British Office Committee was presented by the Secretary. The following extracts cover the principal matters dealt with:

Baggage Checking System.

An effort has been made to arrange with the General Passenger Agent of the C.P.R. for a through baggage checking system from Liverpool to points in Canada, for all immigrants booked over their line, the idea being to have one British agent collect checks from workmen whose fares have to be advanced and forward same to the employer on this side, thus ensuring the workman going through to destination and reporting for duty. Notwithstanding efforts made both in Canada and in England, the C.P.R. have stated that they are unable to meet the Association in this matter, and it is the belief of your Committee that until the roads in England alter their system of handling baggage it will be impossible to effect the change asked for.

Insuring Passage Money.

The necessity for such a checking system, however, is to a large extent done away with by the fact that arrangements have recently been made with a bonding company in England, whereby all advances of passage money may be insured. The applicant for the insurance must of course be able to satisfy the company that the moral hazard is a good one. The premium will be $2.50 per fare, no fare to exceed $35, and with each week the employee remains at work after his arrival the liability of the insuring company will automatically decrease $2.50. This arrangement presupposes that the employer will reimburse himself out of the workman's wages to the extent of $2.50 each week until the whole advance is repaid.

Before putting the arrangement into effect careful enquiry will be made into the financial standing of the insurers.

Complaints re Service.

A lengthy report was made by the Committee regarding complaints of unsatisfactory service that had been received from members. This report was based on the personal investigations made by Mr. Bermingham, a member of the Committee, who had visited the office of the Association's London agent.

It pointed out that generally speaking employers who had had no personal experience in engaging help abroad failed to realize the difficulties under which the work had to be carried on. Fully 90 per cent. of the people applying for work were either unfit or undesirable for employment in Canadian ractories. Each one, however, had to be seen and spoken to before his fitness or otherwise could be ascertained, and this weeding out process involved a great deal of time and work. In the case of the remaining 10 per cent. references had to be looked up. Frequently they were found to have been given without sufficient justification, while sometimes they proved to be quite bogus. A number of the cases of dissatisfaction reported were shown on investigation to have been due to the unreliability of testimonials given by reputable firms, clergymen and others whose word would ordinarily be expected to carry weight.

Considering these points and balancing off the cases of dissatisfaction with the cases where absolute satisfaction had been given, the Committee were of the opinion that the work was being done as well as could reasonably be expected.

The report concluded with the recommendation that a hearty vote of thanks be extended to Mr. Bermingham for his valuable services.

The adoption of the report moved by Mr. Robins, seconded by Mr. Birks, was carried.

On motion of Mr. Beer, the Committee was requested to supply the Council at the January meeting with a statement showing the receipts and expenditures to date as well as the liabilities incurred and the revenue earned.

BRANCHES.

The report of the Quebec Branch was presented by Major Hetherington, and was regularly received. It will be found below.

NEW BUSINESS.

Under the head of new business Mr. Younge took occasion to express the appreciation felt by all those from outside points who had enjoyed the hospitality of the Ottawa members, and it was with pleasure that he moved that a hearty vote of thanks be tendered them. Mr. Casavant seconded the motion, which was also supported by Mr. Wilkins and carried unanimously.

Mr. Wilkins thought the Association should again make an effort to secure the repeal of the tax on commercial travellers that was still being maintained by Prince Edward Island. He pointed out that this piece of provincialism had been abandoned in nearly every other part of Canada, and expressed the belief that its repeal could also be brought about in Prince Edward Island if gone after in the proper manner. He accordingly moved, seconded by Mr. Dougall, that the Parliamentary Committee be asked to co-operate with the Commerrial Travellers' Association to this end. Carried.

The meeting then adjourned.

DINNER OF TORONTO BRANCH.

The Toronto Branch of the Canadian Manufacturers' Association held a dinner at McConkey's on Dec. 19 to discuss the Power By-law. The importance of the subject was sufficient to draw out a large attendance, and the members were rewarded by one of the clearest presentations of both sides of the question which was given during the whole campaign. Mr. E. J. Freyseng, Chairman of the branch, occupied the chair, and there were also present many manufacturers who have taken a leading part in helping to solve the problem of power. After a thorough discussion a resolution was proposed by Mr. J. O. Thorn and Mr. Thos. Roden in favor of the by-law. This was carried by a large majority.

QUEBEC BRANCH.

Since submitting the annual report of what had been done by our Branch, we have pleasure in announcing that as a result of our efforts, we have been able to convince the Quebec City Council of the inadvisability of hurrying the adoption of a most drastic smoke by-law, which we considered unreasonable.

Our civic authorities were particularly interested and impressed by the memorial we submitted to them on this matter, and we now have their assurance that no ordinance will be enacted without first consulting us and endeavoring to meet our own suggestions.

Our Branch adopted also special resolutions in favor of the two petitions placed before the Premier of this Province, Hon. Mr. Gouin regarding the labor of the Province of Quebec, and also an amendment to the law of garnishment. It has been decided that our Branch would support the Montreal Branch by all means at our disposal to obtain the earliest effective action of the Provincial Government on these questions.

On October the 15th last, our Branch gave a most successful dinner to its ex-Chairman, Mr. G. A. Vandry, on the occasion of his return to Quebec after a trip around the world. The President of the Association, Hon. Mr. Rolland, was present among the invited guests, and once more we had the occasion to recognize the good results of such pleasant gatherings, tending as they do to bring together and make better acquainted the members of the Manufacturers' Association in the ancient Capital.

Our Branch presented a memorial before the Government Commission re Workmen's Compensation. All the other public organizations, such as the Board of Trade, the Boot and Shoe Manufacturers' Association, and the Builders' Exchange of our city, were seen before taking action, and we are glad to say all were unanimous in adopting our own views on this matter. While admitting we were in favor of legislation preventing the recourse of interested parties to expensive litigation, we suggested that such matters being particularly

connected with industry and therefore trade and commerce, we would learn with pleasure the adoption of any law on this important question rather by the Federal Government than by the local legislature. So that the result would be a uniform law for all the Provinces, and all Canadian manufacturers would work under the same conditions.

Our Local Executive Committee, with the President of the Special Committee on Technical Education, had on November 27th an interview with our Premier, Hon. Mr. Gouin, on this question. You will no doubt learn from Mr. Wickett the result of this interview.

Our Branch has been for some time considering the advisability of enlarging its sphere of action by taking in all the- manufacturers, members of the Association of the surrounding districts, who now as isolated individuals, have not the same means of making their influence felt in local affairs as if they belonged to a branch. This would be mutually beneficial to the Quebec Branch and the outlying parties concerned. A motion to this effect will be brought before your Council.

It is also a satisfaction for us to report that for the last two months, our membership has increased by 10 per cent., as seven new members have been proposed and accepted.

All of which is respectfully submitted.

MANUFACTURERS' REPRESENTATIVE.

A capable and enterprising business man with two years' experience in a high class Canadian manufacturing establishment is anxious to hear from a few good Canadian firms seeking to develop export business in Great Britain, which is his native land, and to which he is about to return. Can furnish excellent references, and has a good proposition to put before firms interested. Will handle any lines and push them hard. Address can be obtained at this office.

AN ARTISAN SCHOOL.

The following interesting account of the establishment of a school for workmen is given by Professor John E. Sweet, of Syracuse, N.Y., in a recent number of *American Industries*:

It having become known to some extent throughout the country that the proprietors of the iron industries in Syracuse had started the Artisan School, a place where boys could learn the machinists' and pattern-makers' trades, the letters of inquiry that have poured in on us indicate that the machinist branch of mechanical industries is alive to the notion that something ought to be done to give opportunities for American boys to learn the machinist trade, not only to give the boys a fair chance, but to meet the call for the fast growing demand for good men.

To learn that a thing ought to be done, and even to be willing to help if some one will show the way, is not doing it.

While our wealthy men like Rockefeller, Cornell, Vassar and many others have given fortunes to build up educational institutions and Carnegie libraries; and Pratt, Webb, Williamson, Sibley, L. C. Smith and others have established schools where book and hand learning are combined, they almost all lead to the production of men of a technical character who are not just what the country is most in need of; and cannot fill the want for that class of men for which there is the largest field, competent workmen.

The Artisan School, it is believed, is the first, or among the first started, with the sole view of training workmen pure and simple.

Whether it can be made to work is entirely problematical. It is easy to predict that it won't and enough reasons why can be advanced, but just whether it can or not no one can tell because no one has tried.

It is true that the Webb School, the Pratt Institute and the Williamson Schools are successful, but the money was given by individuals and the schools, as said before, are a combination of books and shop.

The Westinghouse, General Electric, and perhaps other schools established by great industries, succeed in making men for themselves, but they are so situated that they have at hand suitable kinds of work and all grades of work to meet the ability of the boy; but the school pure and simple has to purchase its material, has to devise its own work, has to dispose of its product. To make machinists it must do machine work, must have a plant, teachers, power, heat, light and water, and all these cost money.

To pay, after all these are provided, then will be the work of the boys which you either get for nothing or for pay, if it is decided to pay.

Some say you cannot get the boys if you do not pay. So far the Artisan School has demonstrated that you can.

It is said they will not stay; well, so far they do. Whether they will stay until they become good machinists no one knows yet.

It likely will depend on the teachers, the character of the work, which must be such as they can take an interest in, and the attractiveness of the place, or the influence of the parents for the first few yeads, and the salaries the journeymen receive after they are set adrift.

So far as the first seven or eight months show, it is certain the boys cannot earn one-third of the bare running expenses. Maybe the right management would do better. It has shown that the number of boys that one instructor can handle while all the boys are fresh are very few—five or six keep him busy.

It has been the aim to do everything better than the same class of work is done in the regular shops, believing that this will build up a reputation for the boys when they go out.

It is the belief that if the boys are trained to do honest work a stride has been made toward making honest men.

Just what could be done with boys if they had gone through such a course of training as President Van Cleave advocates no one can tell.

We have to deal with the boys as we find them, but whatever the plan, teaching trades is going to cost money. The glory is not great enough to have many wealthy men put it up.

The machinist trade cannot be taught, or rather the boy cannot learn the trade without the machines and tools to work with and make commercially workable machines and tools. He must do the work in the school that he is to do outside, and do it in the same way.

The best shop customs must prevail and the place must think, talk and smell of the shop, must create shop enthusiasm and pride in its product, and the product must be things at first and the best machinists in the end.

A National Type.

A most artistic and attractive Christmas remembrance has been received from the Ontario Engraving Co., of Hamilton. It takes the form of a reproduction of "The Habitant," a characteristic study of the French Canadian, an old man, with his ever present pipe. The head is mounted on colored mattes, and is so artistic as to ensure its exhibition in a prominent place in the owner's quarters.

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INDUSTRIAL CANADA

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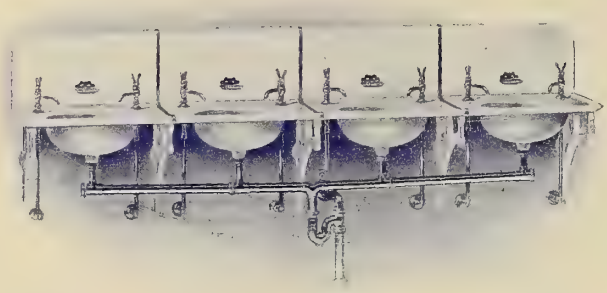
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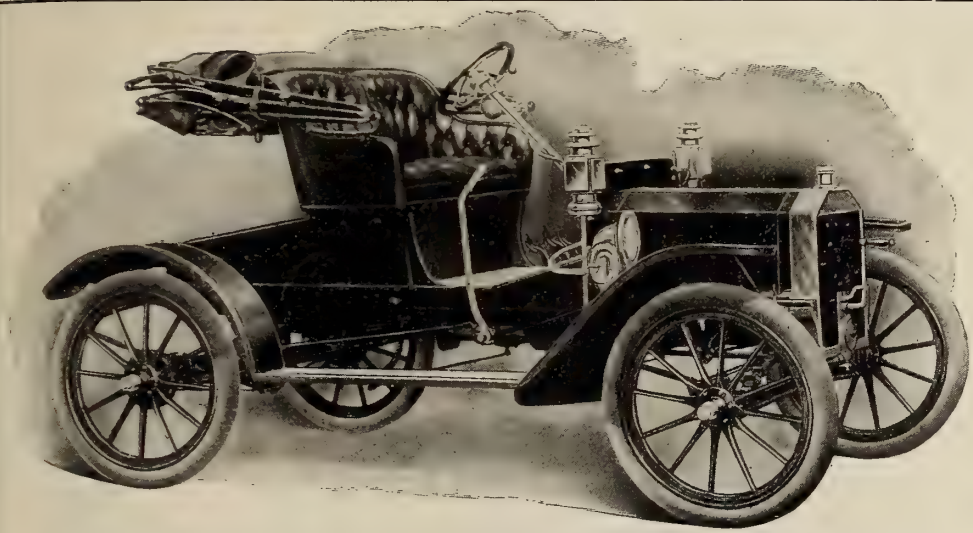
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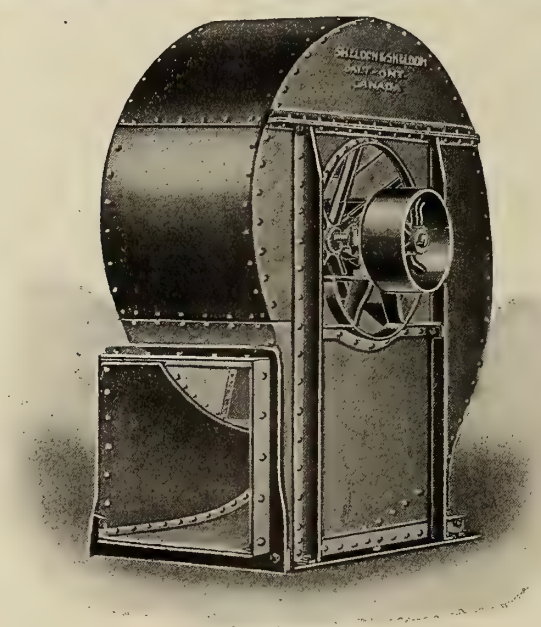
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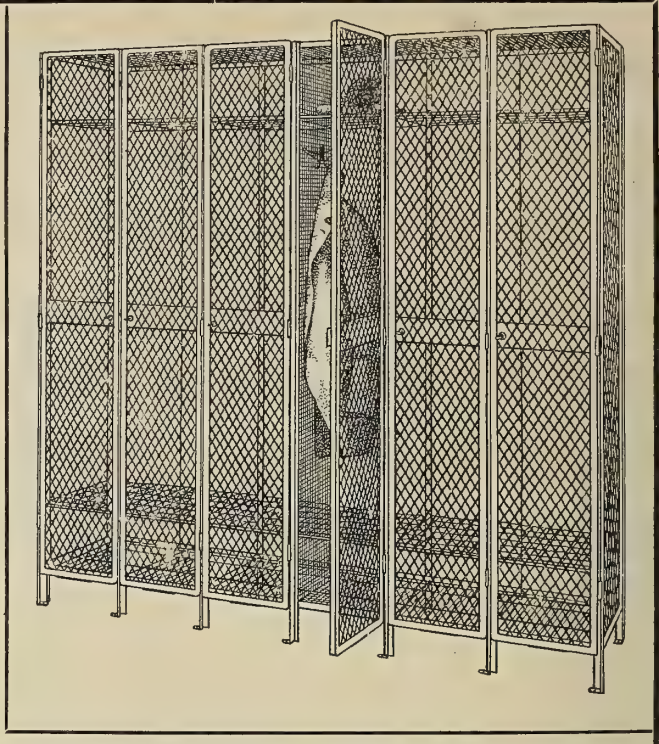
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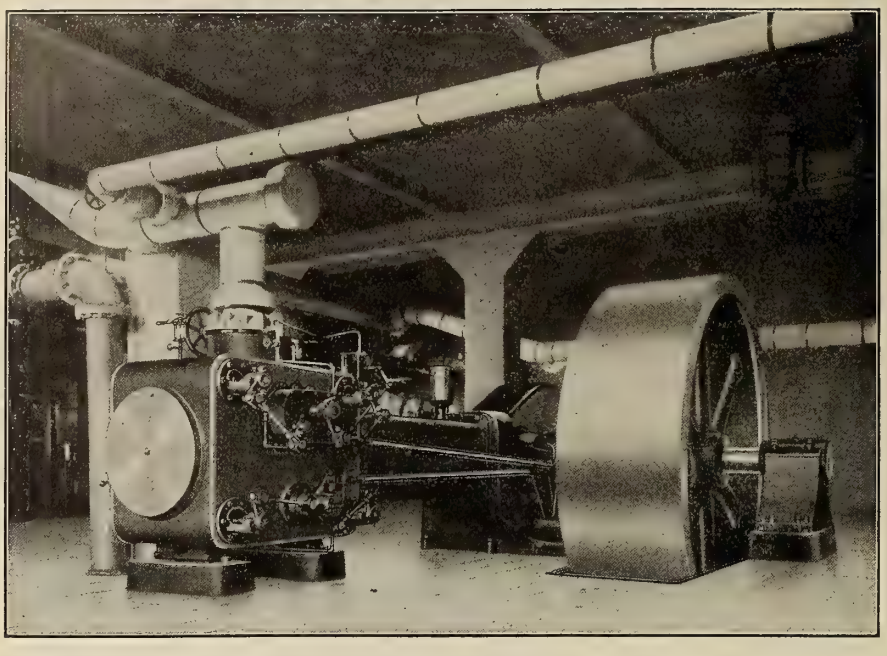
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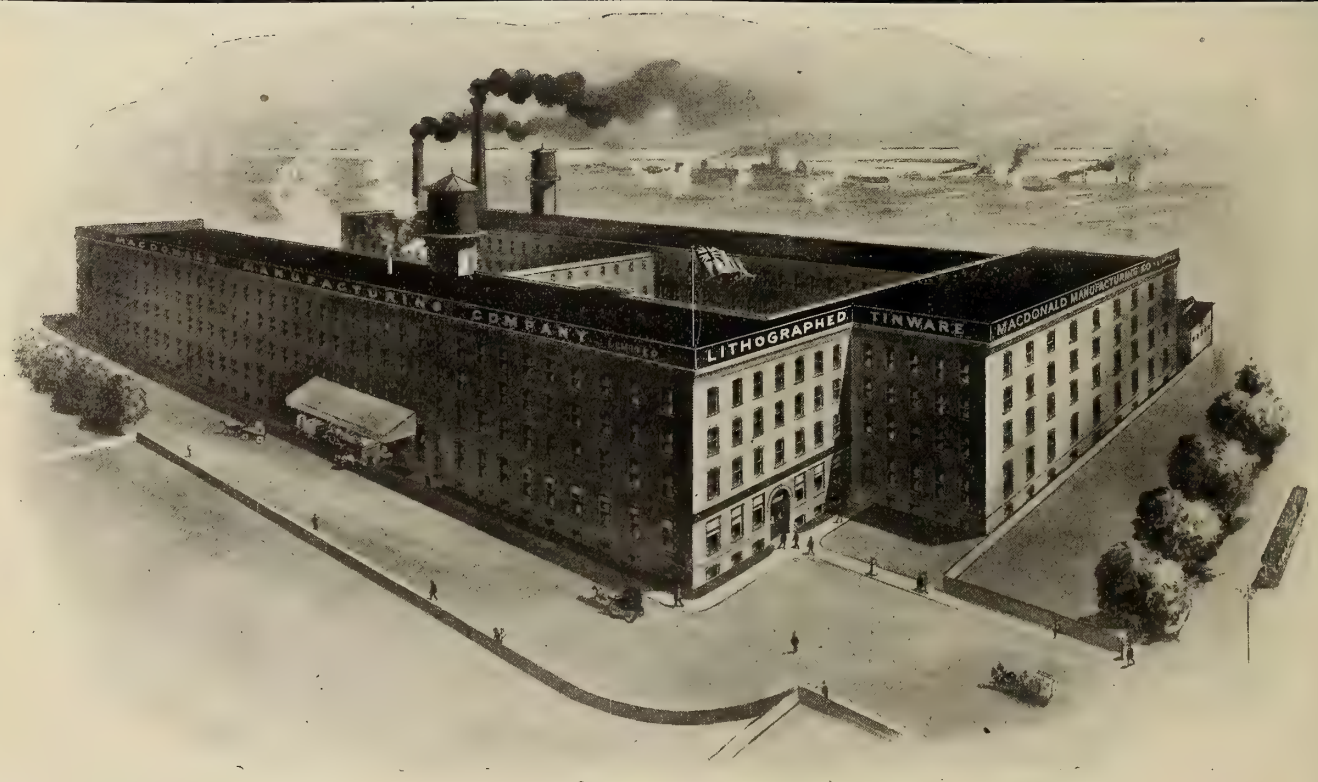


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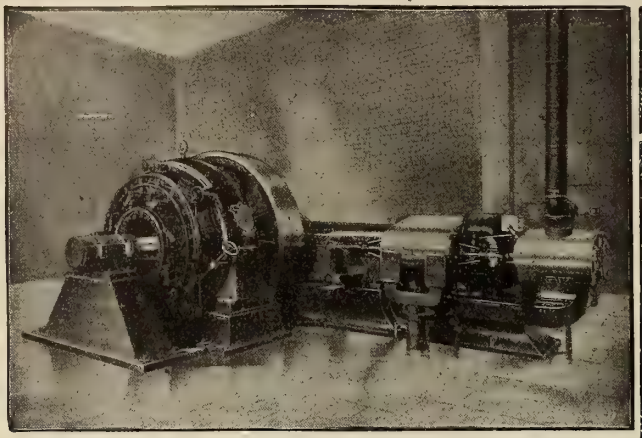
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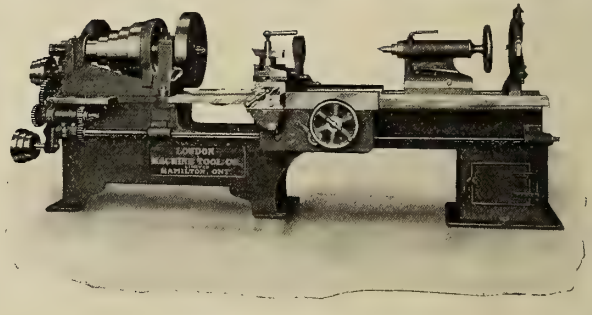
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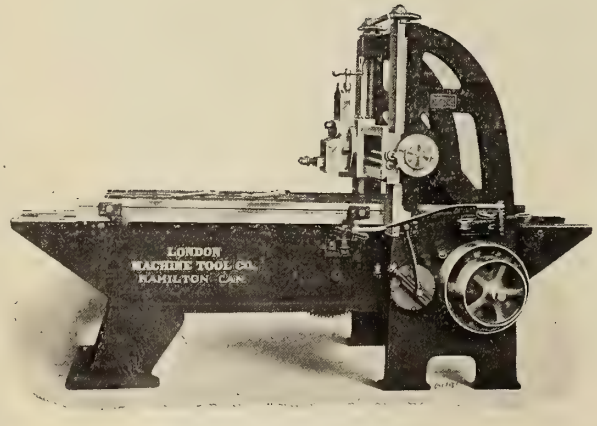
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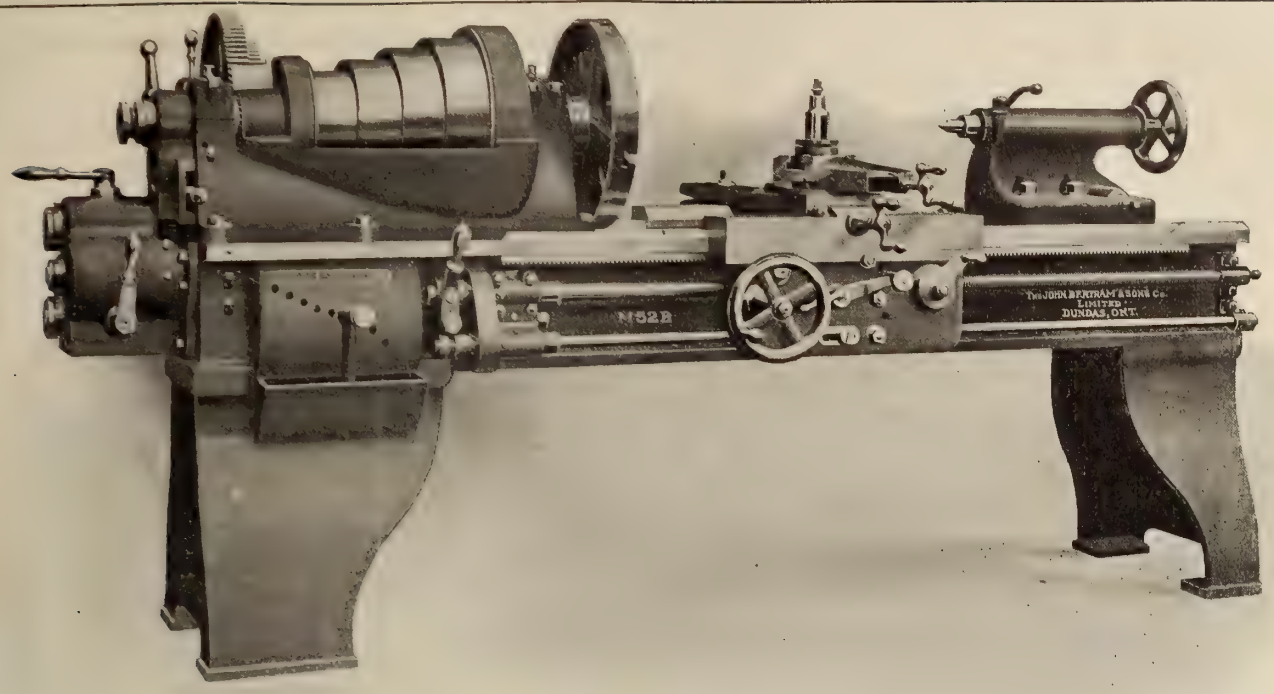
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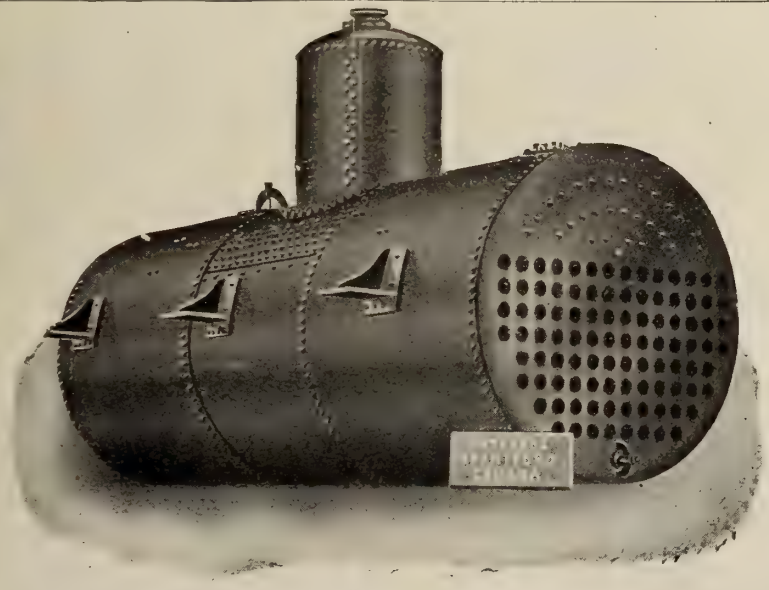
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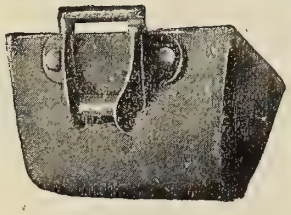
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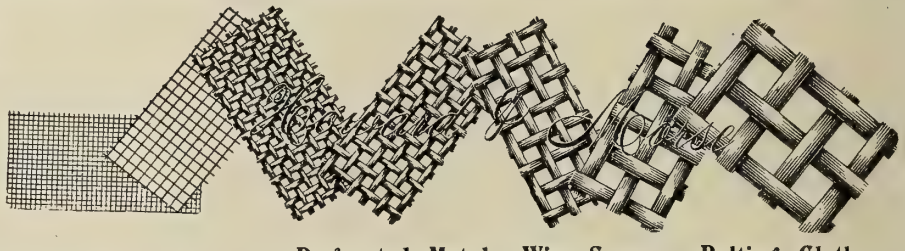
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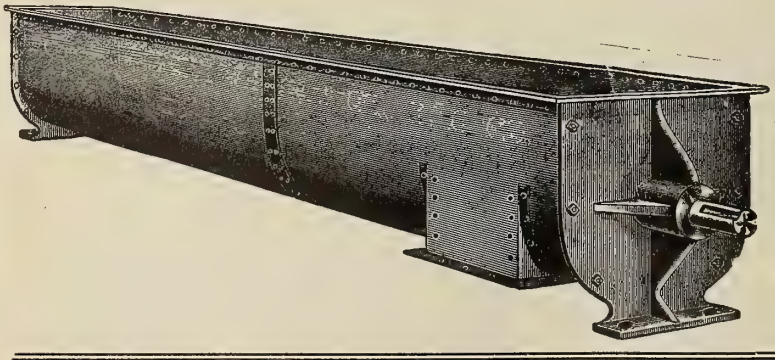


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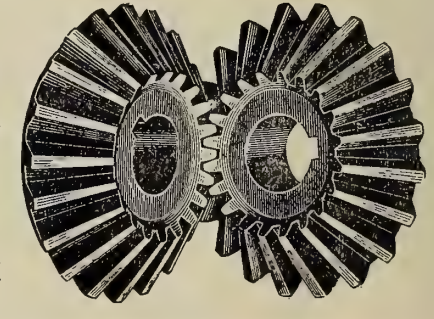


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Vol. VIII. TORONTO, FEBRUARY, 1908 No. 7

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THE EDITORIAL VIEWPOINT.

What Our Immigration Agents Do.

The Minister of the Interior, in a debate in the House of Commons on immigration matters, stated, as if it were something that justified the Government's whole policy on this question, that the Canadian agents abroad were instructed to confine their efforts exclusively to the sending out of farmers, railway laborers and domestic servants. No encouragement, advice or information was to be given to anyone concerning any other line of Canadian activity. If unscrupulous persons took advantage of the ignorance of skilled laborers and investors to fleece them in the name of Canada that was something for which the Government could not be held responsible. The Government had no interest in these people, and had instructed all its agents to refuse to enlighten them on Canada and its advantages from an industrial or commercial standpoint. So long as the agents of the Government confine their efforts to sending out farmers, laborers and domestic servants, there could be no ground for complaint, according to the Minister. Some of the rest of us take a different view, however. When, for instance, we see some of these railway laborers, of whom the Minister boasts, murdering each other on our streets; when, in a city like Montreal, the pistol and stiletto in the hands of these *protégés* of the Government have become a menace to the lives of our citizens, is it any wonder that we question the wisdom of paying a bounty for this class of citizens, while refusing all information to skilled laborers and small capitalists? The farmers, the laborers, and the domestic servants we need, and it is a good thing to send them out, but we also need capital, and very frequently there is an urgent need of skilled mechanics, and these should at least have an opportunity of finding out from a reliable source what prospects there are in Canada for them. The failure of our officials abroad to give this information, very frequently results in the loss to Canada of the most desirable class of citizens.

What They Don't Do.

About a year ago the writer was in the Canadian Immigration Office in London one day when an incident occurred that strikingly illustrates the folly of the present policy. A sharp, business looking man, of perhaps forty, came in, and, walking up to an official, stated that he had between five and six thousand pounds ($25,000 to $30,000), and had made up his mind to go to Canada or Australia and go into business. He wanted information as to whether it would be wise to open in Montreal or was there some other city or town with better opportunities? Here was a man with capital—more capital than four-fifths of our merchants—who could purchase and pay for a stock of goods, who would be a help to our manufacturers and to any town in which he located. This was the kind of man one would have expected to see received with open arms and assisted in every way possible. Not so, however. The instructions from Ottawa, which Mr. Oliver parades as the Government's defence, stood in the way. This man did not fit into farming, railroad navvying or domestic service. The services of the Canadian Office were not for him, and so he was told. The agent gave him some pamphlets about farming and let him go—most likely to Australia. Enquiry elicited the information that a great many men of this class called and all were treated in the same way. Surely this is not in the interest of Canada. It is hard to believe that such a stupid policy is in force, but what one sees with one's own eyes one is forced to credit.

What They Should Do.

If the Government Immigration offices in London and elsewhere were instructed to do all that they are in a position to do for the upbuilding of this country, there would be no chance of an incident such as the above occurring. They should be supplied with full information concerning the in-

dustrial and commercial conditions of Canada, and instructed to give all the assistance in their power to people seeking such knowledge. It is hard to understand the reasoning that makes it a virtue for the Canadian agents to send out railway laborers and a crime for them to send out skilled mechanics. It is a duty of the agent to hunt up laborers and tell them where they can get work in a railway camp; but an offence to even mention that a Canadian factory is short of hands. This does not seem right or fair on the face of it, and it needs some better explanation than has yet been given. One would think that the Government Immigration Offices abroad would be supplied with every possible kind of information concerning every feature in the life of the country, and that it would be freely given to every one that applied for it. The offices need not be turned into employment agencies, but they should act as information bureaus, which would offer some measure of protection to foreign workingmen, who are now at the mercy of unscrupulous fake agencies. It should be as much the duty of the Canadian offices to warn skilled workingmen who are not needed against coming, as to give them information of any shortage that may exist in any line of industry. If this were done there would be fewer skilled workingmen from abroad vainly seeking employment in this country and complaining of the deception of which they are the victims.

A Piano Deal.

It is not often that the purchase of a piano becomes a matter of public concern, but then the Government is not purchasing pianos every day, and perhaps it is as well for the reputation of Canadian instruments that it is not. Recently, two new pianos were purchased by the Government, one for the Speaker of the Senate and one for the Speaker of the House of Commons. The instruments chosen, strange to say, were not of Canadian manufacture, but two of an American make that at one time enjoyed an enviable reputation. To-day, however, there are a number of manufacturers in Canada turning out superior instruments, and it was to have been expected that one of these would have been chosen. The agent of the American instrument was not slow in making use of the advantage the Government had given him over the native article. He announced the fact in the press, using the Government's choice as an argument in favor of the imported instrument and a good argument it was, too. If the Government had to go outside of Canada to get a first-class instrument, the inference is that other people would do well to follow the example set them. The piano manufacturers of Canada have every reason to complain of the Government's action in this matter. The purchase of a piano more or less does not make any great difference to them ordinarily, but when it comes to the Government passing by all the high-class Canadian pianos to place the seal of its approval on a foreign instrument of inferior quality, there is just cause for a vigorous protest. Even had the piano chosen been superior to any made in Canada, that would not have been a sufficient excuse for going outside the country to make the purchase. As a matter of fact, Canadian manufacturers are turning out instruments that can hold their own with any in the world, so that even that excuse is denied the official responsible for the purchase. The politicians do a lot of talking about the deep interest they take in the progress of the country, and the great pride they feel in the advancement of its industries, but one has reason to doubt their sincerity when an instance of this kind crops up.

Enforcing the Dumping Act.

The Dumping Act is intended to protect Canadian manufacturers and merchants against slaughter sales of foreign goods. At a time like the present, when there is a pressing need of ready money in the United States, the temptation to slaughter goods on the Canadian market, where the money stringency has scarcely been felt, is very great, and were it not for the provisions of the act our markets would be so flooded with slaughtered stocks that our factories would have to close down for want of orders. The act is right in principle, but in its operation it is sometimes very annoying and costly to Canadian merchants who have consignments seized through the ignorance of the customs officials. Very often there is a legitimate, though sudden, drop in the price of a commodity, and a Canadian merchant who secures a consignment at the reduced price runs the risk of having it held up by the Canadian Customs officials under the provisions of the Dumping Act. The officials are not to blame, for they are performing their duty to the best of their ability. They have neither the time nor the opportunity to follow the market fluctuations in the hundreds of lines of merchandise they are called upon to examine for entry. When a customs examiner comes across an invoice for a consignment of goods, which shows a reduction in price of twenty-five or even fifty per cent as compared with a similar entry of perhaps only a week before, his suspicions are naturally aroused and he refuses to pass the goods. The invoice may be perfectly correct, but how is he to know it? The merchant may be in urgent need of his goods, but he has to do without them till the matter is investigated, and this is a slow process. If the goods happen to be a part of his winter stock he has a fair chance of getting them some time in July, when they are practically worthless to him. Instances have been known where goods were held till the market actually dropped far below the invoiced price at which they were refused entry. In such a case the merchant has to take his losses. It is needless to say that this is a serious state of affairs and calls for a remedy.

Cases of Under-valuation.

On the other hand the undervaluation that passes without challenge is probably quite as common. There are very few people in Canada who have not received from their local merchants clothing or fur catalogues which were printed in the United States. The dealer sends his photographs to an American printer who has cuts made from them, prints the catalogue and invoices it at the mere cost of paper and printing. The cuts are kept on the other side of the line and are charged for in a separate invoice. For instance, a merchant orders a catalogue to cost him, say, $1,000. Of this, $500 goes into the engraving and the balance into the printing. When the shipment of catalogues arrives at the port of entry, it is invoiced at $500, and passed at that figure. The bill for the cuts comes by mail and is paid for separately. This is a glaring instance of under-valuation that is costing our printers and engravers thousands of dollars every year. Another instance is that of a Montreal manufacturer, who was being ruined by unfair competition from London. Goods in his line were being passed through the customs at a valuation far below what he could manufacture them for. He complained repeatedly, but could get no satisfaction, till at last, in desperation, he packed his trunk and went to London himself. There he had no difficulty in collecting the evidence to prove his case, and so he got relief. He had to spend his time and his money and neglect his business, but his only choice lay between that and ruin. It does not seem fair that anyone should be put to such great inconvenience and expense in order to get relief under the law.

The Remedy.

The remedy for these evils lies in an efficient staff of inspectors. At the present time the Government has only

five inspectors in the United States, and none at all in Europe. Even admitting that these five men are the most industrious and competent possible, to expect them to keep in touch with conditions throughout the United States is to expect something that is not within the range of human ability. The staff should be large enough to cover the ground and should include practical men in every line. In the case of the catalogues, for instance, a practical man could in a very few minutes estimate within a few dollars the actual cost of production and prevent them going through at an undervaluation that is unjust to our own printers and engravers. The Canadian printer has to pay duty on his type and printing presses, which are not manufactured here, and on certain lines of coated papers most commonly used in such work. In like manner the engraver has a heavy duty to pay on his copper and zinc and machinery, and he is not in a position to compete with the Americans if they are allowed to invoice their shipments at half their real value. The same is true in other lines, and the only way to stop it is to have a staff of inspectors with the necessary technical knowledge. If the customs tariff is to fulfill its purpose it is necessary to have it enforced in an intelligent manner, which in many instances is not the case at the present time.

Cancellation of Orders.

Many of our manufacturers have a grievance against wholesalers and jobbers who cancel orders months after they have been given, and at a time when the goods are nearing completion and most of the cost of their production has already been expended. Take, for instance, the case of a wholesale house ordering a line of woollen goods. The manufacturer purchases the raw material and sets to work on turning out the goods. When he has disbursed for material and labor probably three-quarters of the total value of the order, along comes a notification from the wholesaler to cancel it. The manufacturer can, of course, compel acceptance of the goods, but if he does so the wholesaler will never give him an order again. This is a very unfair position in which to place the manufacturer, but under the present system of selling through wholesale houses and jobbers, he is helpless. The only way for the manufacturer to free himself from this bondage, for it cannot well be otherwise described, is to put his own travellers on the road and sell his products direct to the retailer. This means a big increase in his office staff and sales department, but he would get a better price for his goods, and would not have to take the losses which the cancellation of half-completed orders entails. If the wholesalers persist in their present treatment of the manufacturer, the upshot will be that the latter will go after the retailer direct, and the middleman will find himself out of business. The manufacturer has the best side of the argument if he elects to put up a fight for fair, not to say honorable, treatment.

A Valuable Clause.

There is a clause in the French Treaty that is deserving of commendation. However the rest of the treaty may work out, the clause making it necessary for goods to be shipped direct to and from a Canadian port in order to enjoy its benefits, cannot fail to be of great service in the building up of our ocean ports. Some of the big American manufacturing firms who have branch factories in Canada, are already making arrangements to manufacture in this country all the goods they require for their French trade. This means, in addition to the increase in shipping, an increase in employment for our workingmen. To get the fullest benefit from this clause, however, there is need of a vast improvement in the transportation facilities inland from our winter ports. A merchant in Toronto or Montreal can get delivery of goods by fast freight from New York in twenty-four hours, from St. John he is lucky if he gets it in a week. One Montreal firm that has a car shipped every Saturday morning from near Halifax, seldom gets it before Thursday, and often not until Friday, and this, notwithstanding that it is a regular shipment every week in the year and is supposed to take only forty-eight hours. This is a state of affairs that needs improving, if the advantages of the lower duties via a Canadian port are not to be more than offset by the losses which delays in transportation frequently entail.

The Pulpwood Question.

Press dispatches inform us that a United States syndicate has been making purchases of large tracts of pulpwood forests in New Brunswick, with a view to supplying the demands of their pulp and paper mills located in the New England States. This brings home to us the urgent need there is for immediate action on the part of the Dominion Government in the direction of some measure to prevent the sacrifice of our pulpwood forests for the benefit of American mill-owners. As already pointed out by INDUSTRIAL CANADA, our pulpwood forests are amongst the most valuable of our natural resources. Their conversion into paper here in Canada would add many millions to the wealth of the country. Thousands of men would find employment in the hundreds of factories necessary to carry on such an extensive undertaking, and the feeding, clothing and housing of these would mean profitable employment for thousands of others. The farmer, the manufacturer, and the merchant would all feel the benefit, and Canadians generally would be getting the full advantage. But all this depends upon the prompt action of the Government. It is not a matter to be put off from session to session and from parliament to parliament. While the Government hesitates, the Americans are at work hewing down the forests and hauling them across the line to give employment to American workingmen. Now is the time to act, not after the forests have been destroyed, and all the wealth that is in them has been extracted by foreigners. What is the good of being a Canadian if anyone from anywhere is at liberty to come in and carry away all the natural wealth of the country without let or hindrance? If the natural resources of Canada are not going to be conserved for the particular benefit of Canadians, we might as well throw the whole thing up, and stop our foolish talk about being a nation. Making treaties of questionable value with foreign countries is not going to deceive anyone into believing that we have suddenly sprung into full-fledged nationhood. A much better indication of nationhood, as of manhood, is to appreciate our advantages and protect them against all comers.

The Chartering of Railways.

At every session of parliament applications are made for railway charters, many of them from anywhere to nowhere. It would be interesting to know how many thousands of miles of railways have been chartered that have never been built and were never intended to be built by the parties who obtained the charters. A charter which costs very little to obtain frequently sells at a big figure, and it is safe to say that many charters are secured for the sole purpose of speculation. The railways already in operation, especially the big systems, make applications every session for a whole grist of charters, and they usually get all they ask. Most of these charters are sought for the purpose of shutting competition out of the new districts which promise development. The

charters sought for the purpose of speculation should be refused in every instance; and those sought by companies already operating lines should not be granted until the lines already built are fully equipped. The feverish haste with which the big systems are building branch lines and feeders is responsible for the very unsatisfactory service given on main lines. As soon as a branch is completed into some new district, some other portion of the system is robbed of equipment to start the new service in operation. This results in a shortage of cars everywhere and gives satisfaction to no one, except, perhaps, the railway which has succeeded by this means in forestalling competition. The cry of shippers, both East and West, is for more cars and the reply of the railways is more miles of track. The railways should be compelled to maintain a fixed standard of equipment on every portion of their lines, and until that standard has been reached and the roads are in a position to maintain it, no new charters should be granted to them. Until some rule of this kind is made and maintained, shippers will have to contend with the present unsatisfactory conditions.

The Unemployed.

We have been hearing a good deal about the unemployed lately, and considerable sympathy has been wasted on them. It is true there are some cases which are deserving of sympathy, but they do not by any means form the majority. There are many men walking about in idleness to-day, not because they cannot get work, but because they will not work under the new conditions which the recent financial flurry has brought about. The manufacturer who keeps his plant working at its full capacity under the present uncertain conditions is taking big chances, for he is not sure that he will be able to dispose of his output, and if he does the chances are that it will be at a reduced price. To meet this he has to reduce the cost of production, and a lower scale of wages than has obtained in the past few years becomes a matter of necessity. He goes to his men and lays the case before them, offering to keep them employed if they are willing to accept a reasonable wage under the circumstances. It is a perfectly fair and reasonable proposition and, more than that, a generous one on the part of the employer. Some of his employees have the brains to appreciate the situation, but others rebel and quit work. These latter form a large part of the unemployed who want people to sympathize with them. A typical case was reported by the Ottawa *Citizen* recently. A reporter was commissioned to investigate the labor situation in that city, and amongst the many instances he came across was that of a man who had refused a dollar a day and his board for a winter's work, because last year he had been paid a dollar and a quarter. The advocate of the workingman's rights was living on what his wife could earn over the wash-tub on two days in the week. In half an hour's walk about the market seeking employment, the reporter was offered five different jobs. The independent investigations of the *Citizen's* reporter demonstrated that the unemployed in that city were not suffering from lack of opportunity to work, so much as from lack of ambition to earn an honest living. What is true of Ottawa is true to a large extent of every other section of Canada. If all the positions that are open at a reasonable wage were filled, the ranks of the unemployed would be greatly reduced, and the few remaining idle would not have long to wait for an opportunity. The only difference between the labor situation now and a few months ago, is that the employer is to-day in a position to fix the salary he is able to pay, instead of having the terms dictated to him by the gentlemen of some union.

The Fake Farmer.

Another gentleman who contributes largely to the ranks of idleness is the fake farmer, for whose presence in this country the Government has paid a bonus of one pound sterling. While the theory is that none but farmers, navvies and domestic servants come under the bounty of the Government, the practice is for the agent to ship out anything that can be made to class as one of these and collect his reward. All the workman has to do is to represent himself as a farm laborer and the Government Immigration agent gets his commission on him. After he lands in this country he may become a bricklayer, a carpenter, a plumber or any other mechanic that he may have been in the old country. Some of the agents are not too scrupulous to tip the mechanic to represent himself as a farmer in order that the booking commission may be collected. Others tell applicants they will have nothing to do with them because they are not farmers, whereupon they pass along to the next Canadian Immigration agent, and, without waiting to be questioned, announce that they have been farmers from childhood and are anxious to get back to nature. On their arrival in Canada, they spend little or no time on the farm, but crowd into the cities and towns in search of employment. These are not the class of men the manufacturers want and they refuse to give them employment, whereupon the Government blames the manufacturer for the existing conditions. Investigation will show that this element forms no small part of the needy unemployed, as well as that of the fastidious class who want to choose jobs and fix salaries. Until the Government devises some plan to stop this traffic in fake farmers, it will have to bear the responsibility for flooding the labor market of Canada. There is no use in their trying to get from under it by shifting it to the shoulders of the manufacturers, who have troubles enough of their own without taking on those which belong to others.

Stock Companies and the Franchise.

This is an age when the joint stock company has replaced the old-fashioned partnership in nearly every business of importance. Indeed the entire wealth of many of our most substantial citizens is invested in this way. There are few really important interests in the country to-day, that do not take the form of joint stock companies, and there is a reason for it. A partnership is a really dangerous thing. The death of a partner or a disagreement amongst partners may easily result in the ruin of a business. With the stock company such things are impossible. The individual is lost in the company. He may die or he may dispose of his interests, but that does not affect the company. In case of death his heirs get the stock and all they can do is deal with it. The company is a thing apart from the individual member. It can buy and it can sell property, holding and giving deeds in its own name; it can sue and it can be sued, and it can even be fined for breaking the laws of the land. But it cannot vote, though it is taxed and made pay its taxes. Here is a weakness in the stock company, which very frequently amounts to a serious handicap. It is a theory of our form of government that there can be no taxation without representation; yet in all our cities and manufacturing towns the bulk of the taxes is paid by companies that have no votes, and therefore no voice in the selection of the men who are to levy taxes upon them. In their case this boasted British theory is given the lie. The stock company has to assume the responsibilities of citizenship, but is denied the privileges, chief amongst which is the franchise.

How It Handicaps.

At the municipal elections in January there was a by-law, known as the "Power By-law," submitted to the electors of a large number of municipalities in Ontario. The carrying of this by-law meant the assuming of a large responsibility by the taxpayers of these cities and towns, and it is safe to say that none will bear such a heavy share of this responsibility as the stock companies, of which there are thousands in the municipalities affected. Moreover, this power proposition was one which touched the companies more closely than any other interests; but they had no voice in the matter. The by-law was carried and the companies will be taxed to carry out its provisions. They have no resource but to pay the taxes whether or not they are satisfied with the proposition. This is a condition of things that does not measure up to what is supposed to be our standard of self-government. When the proposition was made that we should give a cash contribution to Great Britain in aid of the defence of the empire, it was promptly turned down on the plea that it was un-British, inasmuch as it would be recognizing the principle of taxation without representation, because we would have no voice in the selection of those who would have the spending of our money. It does not seem to have occurred to any of the advocates of the contribution to meet this objection by pointing out that the principle of taxation without representation is already well established in this country in the case of stock companies.

The Franchise Must Come.

With the rapid growth of the stock company idea, the day is not far distant when practically all the wealth invested in the business of this country will be represented by stock certificates, and a means will have to be found whereby these vast interests will be given a voice in the selection of the men who make the laws and levy the taxes to which they are compelled to submit. It is not to be expected that every man who holds stock in a company will be given a vote by reason of his holdings, but some plan will have to be devised whereby certain officers, or certain specially selected stockholders will be entitled to express the opinion of the company as a whole, by casting ballots in its behalf. Whether it will be one company, one vote or a number of votes based upon the capital and holdings of the company are matters for discussion and settlement. What is most apparent at present is the fact that the franchise, in some form or other, will have to be granted to the stock companies if the vested interests of the country are to have a say in its government. The stock companies created by the laws of the land, and having no existence outside their jurisdiction, are certainly more deeply interested in the well-being of the country than the individual who can pack his kit, forswear his allegiance and depart to return no more.

Public Ownership.

The Great West seems to have the public ownership bee in its bonnet, and it will be interesting to observe how it works out on the large scale on which they are undertaking it. The Province of Manitoba has purchased the telephone lines of the Bell Telephone Company throughout the province, and henceforth they will be operated as public property. The telephone is a good thing to begin on, for it is a natural monopoly, and if any service should be operated by the government it is one that ought to be successful. Of course the people are expecting all sorts of improvements in service at reduced prices, but by the time the government has paid the operating expenses and earned the interest it will have to pay on the bonds which it issued to cover the purchase price, there may not be much chance left of reducing the cost. If, however, the service is as efficient and the price no higher than was charged by the private company, it may prove a good thing to have it operated by the government of the province. The telephone service is one that does not admit of competition, for competition only complicates matters, and wherever it has been attempted, it has proved to be both annoying and unprofitable. The chief difficulty with the operation of public utilities "by the people for the people," is that they do not receive the same close attention that is given to privately owned enterprises. There is the too frequent change in the governing body, both of our legislatures and municipal councils, and the result is that men who know absolutely nothing about them are called upon to direct the operation of the publicly owned services. It is true, competent managers may be hired and retained for years, but it has yet to be shown that any business enterprise can be carried on successfully when the principal is so ignorant of its workings that he has to depend upon his assistants to tell him what to do and when to do it at every turn. Private concerns do not succeed under such conditions, and it will be interesting to note whether a public enterprise so handicapped can be made successful.

The Lemieux Act.

The Lemieux labor law in operation has developed some features that were not expected of it by those who had a hand in its making. One of these is the killing effect it has had on the closed shop propositions of the labor unions. Wherever this has been a point at issue in a labor dispute that was being settled under the provisions of the Act, the labor men have had to back down. The proposition is so unreasonable and unjust that it could not be maintained successfully before any independent tribunal. The closed shop means a shop or factory dominated by unionism to such an extent that no workingman, however competent, can be employed therein unless he belongs to the union. More strikes and disagreements have grown out of the closed shop demands of labor unionism than out of any other cause. The employers have all along contended that it was unjust and unreasonable, but unionism has fought for it as for very existence. To the employer it meant the practical surrender of control over his own establishment. In the closed shop the unions fix the scale of wages and the conditions of employment. If the employer ventured to discharge a union man he was in danger of having his plant closed down; and if he engaged a non-union man he was in an equally embarrassing position. The union ran the place, and the man who put in the capital and took all the financial risks was expected to do as he was told. The position of the employer under these conditions was intolerable, and when it came to justify itself before an independent board of arbitrators the union had to give way on the closed shop proposition. The complete wiping out of the closed shop would do more to prevent labor troubles than any other action that could be taken with that end in view. Moreover, it would be removing a handicap from that large body of workingmen who prefer to fight the battle of life on their own merits rather than surrender their liberty of action to some union.

A Change in Method.

A striking change has also taken place in the method of conducting investigations under the Act, and it is a change for the better. In the earlier investigations the proceedings were carried on with all the formalities of a court of justice. The meetings were open to the public and the press was admitted and reported everything fully. Indeed, it was the original intention to give as much publicity to the proceedings as possible, but this method of conducting investigations had serious drawbacks. The formality overawed the workingman, and rendered him incompetent to do justice to himself or his cause. Moreover, if he happened to make a rash statement it was reported by the papers, and once it got into print

he felt he was bound to stand by it no matter how firmly he might be convinced later on of his error. This formality and publicity went a long way to making the earlier attempts at arbitration abortive, and had they been persisted in the Act would have been rendered useless. Boards of arbitration under the Act serve their purpose best by acting as mediums for the bringing together of the employer and the employed. All formalities should be carefully avoided, and the workingman made to feel at his ease. Moreover, the shutting out of the press gives him more liberty of speech. He can tongue-thrash the "boss" all he has a mind to, and it will not be printed in the newspapers under scare headings. If he finds later that he has made a mistake and wants to take back some of the things he said in the heat of discussion, he can do so, and the general public will never know that he even so much as thought them. The tendency of all the more recent investigations is in the direction of bringing the two sides together in an informal way, and letting them have it out between themselves. It is a curious development from the first ideas, and indeed from the intention of the Act; but it is a development along the lines of least resistance, and is, therefore, one that is likely to produce the best results.

The Financial Situation.

There has been a decided improvement in the financial situation in the United States during the month, which was reflected in the rapid recovery in stocks traded in on the Wall Street market. The return of confidence is further indicated by the depositors who took fright in the early days of stock panic and withdrew their money from the banks, redepositing it. The outlook for easy money is much brighter, and there are those who predict that it will be a drug on the market before many months have passed. Yet, marked as the improvement has been, conditions are still far below normal, but that the danger point has been passed and a new period of prosperity is about to begin, seems to be the opinion of those best qualified to judge of the situation. While the shrinkage in values of securities reached the lowest point ever known, the period of depression was also of the shortest duration. The quick recovery indicates that there was no real cause for the collapse. It was more in the nature of a stage fright than the outcome of natural causes. Business throughout the country was in a healthy and prosperous condition and there was no reason to expect any change. It is said that the stock market reflects the general business conditions of a country, but in this instance the reverse was the case. While business conditions were the best ever known the stock market suddenly went to smash, causing a depression in trade and commerce, for which there was no reason outside the stock market itself. Right up to the time of the break in stocks deliveries were reported far behind orders, showing that there was no overproduction to cause trouble. Indeed, at no time during the panic were orders lacking. The difficulty was to get ready money to carry on manufacturing to meet the demand. The only way, therefore, to account for the slump in securities is to attribute it to stage fright amongst the gambling element on the market. This fear was communicated to the millions of workingmen and small traders who loaned their savings through the banks to manufacturers, and they demanded the return of their money. The banks in turn called upon their borrowers to take up their paper, and in this way the cash with which the business of the country was carried on was taken out of circulation, and the factories had to close down. Now that the general public has come to see that the trouble was with the stock gamblers, and not with the industries of the country, confidence is being restored, and the outlook is for a return of prosperity in 1908 greater even than that which preceded the panic.

The Situation in Canada.

Canada has suffered some from the trouble across the line; but we have had no serious commercial failures, none of our companies have passed dividends, and our banks, as shown by their annual statements, have added to their resources, with the exception of one the position of which was critical before the present financial troubles began. The only effect that the short-lived depression has had on Canada has been to make our business people act with a little more than usual caution. A feeling of uncertainty as to the future has had a tendency to curtail orders, and our manufacturers have sought to protect themselves by cutting down production. Some Canadians have been hit, and hit hard, but that was through investments made on the American stock market. If their experience has the effect of teaching them the wisdom of investing their surplus cash in good, substantial Canadian enterprises, it will, in the end, prove a good thing for them and for this country. The stock markets of the United States burn up a great deal of good Canadian money that could be safely and profitably invested at home. If it were not for the money that goes out of this country for investment in erratic American stocks, we could afford to view with smiling indifference the periodic panics they have over there. Unfortunately, however, some of us have got the get-rich-quick mania of the United States, and the steady, substantial growth of Canadian enterprises does not appeal to these. Aside from this class of investor, no one on this side of the line has been seriously hurt, and it is safe to predict that Canada in 1908 will continue to forge ahead as she has been doing in the past few years. We have too good a grip on the future to be frightened by some other person's misfortune into letting go.

The French Treaty in Parliament.

The French Treaty was discussed in Parliament during the past month, and was allowed to pass the first reading without a division, which is customary with all bills introduced in the House, but on this occasion the Opposition wanted it distinctly understood that they were not in any way bound by allowing the first reading to pass in the usual way. Hon. Mr. Fielding made a somewhat lengthy speech in favor of the treaty, but when he got through it cannot be said that anyone had received any new light on the subject. Hon. Geo. E. Foster followed with a criticism that was strongly partisan, and from that point to the close of the discussion the speeches were all of a like character, the Government speakers claiming all manner of good things for the Treaty and the Opposition finding no end of faults in it. One of the amusing features of the discussion was the argument as to whether or not the making of the treaty by Canadian Ministers was a new departure. The Opposition said it was not, that Sir Charles Tupper in 1893 made a treaty with France exercising just as great powers on the occasion as were exercised in the present instance. The Government denied that Sir Charles' powers were equal to those exercised by the representative of Canada on this august occasion. Sir Charles had the aid of an under secretary, or something of that kind, from the British legation in Paris, whereas on this occasion the brave Canadians tackled the job alone. This may be very interesting from a party point of view, but the people of this country in general, and the manufacturers in particular, who are the ones most interested, do not care a rap about who made the treaty or how it was made. What they are interested in is to know how it is going to affect the commercial interests of Canada, and the discussion leaves them in more doubt than ever on this point. One side says it is a good thing and the other says it is not. Therefore, you pay your taxes to keep the old mill going and you take your choice.

D. M. COUGHLIN.

The Security of Policy Holders Weakened

The proposed new Insurance Act objectionable from a fire insurance standpoint. No provision for licensing Mutual Fire Insurance Companies. Aggregate liabilities undertaken by the companies in the congested areas of large cities should be controlled.

THE consolidated and revised Insurance Act of Canada has been introduced by Hon. Mr. Fielding and presents several features worthy of special consideration by this Association. So much discussion has followed the proposals made by the Royal Commission on Life Insurance that it has become the general, but erroneous, opinion that the revised Insurance Act is exclusively taken up with matters pertaining to that branch of insurance. While the Insurance Committee have to record that many sections of the Act are devoted to vastly important points in the practice of life insurance, affecting a very large number of people in Canada, they have not thought it practicable to take any special cognizance of the sections dealing with that subject. They have felt that the agitation throughout Canada for the past two years, the knowledge that many minds are focussed on it and that associations of policy-holders and others are carefully studying the provisions of the Act, make it a work of supererogation for them to take any action in respect of life insurance.

Contrary to the prevailing opinion, however, the Act makes several changes of importance affecting fire insurance interests and fails to deal with some other features that it was thought would have received some consideration. For example, the Committee were of the opinion that the representations made to the Minister by a deputation from the Association in February last regarding the organization and licensing of mutual fire insurance companies would have led to the incorporation, in the Act, of provisions dealing with the same. Apparently the growth and successful development of this class of fire insurance in the United States does not seem to have inspired the Minister with any desire to provide for and control the class of insurance by wise and timely legislation.

The Committee has carefully considered the attitude of the Association to this particular feature and recommended that a further effort be made to have included in the Act provisions for the incorporation and licensing of mutual companies on safe lines.

Some thought has evidently been given by the Minister to the mutual insurance question, for a new section has been introduced as follows.—

> Sec. 12.—"No license shall be granted to any individual underwriter, or underwriters, to carry on any kind of insurance business."

Despite the fact that individual underwriting was the basis upon which the system of insurance was founded and that the principle is now being operated to great advantage and with much success in the United States, the clause just quoted will not only prevent its introduction into Canada, but more important still, it will effectually prevent existing reputable associations of individual underwriters from transacting a legal business in this country under provisions of the Act applicable to all other kinds of insurance.

The Committee is of the opinion that this is discrimination against a perfectly legitimate class of insurance and recommend that the clause be vigorously opposed.

Time of Issuing Annual Report.

Section 50 of the Act provides that

> "The Minister shall lay the Superintendent's annual report before Parliament within thirty days after the commencement of each session thereof."

Apparently this means that the report, hitherto rarely issued before the month of October in each year, is now likely to be longer delayed in view of the session commencing only in the month of November. As it is now the Committee would call attention to the fact that by the time the report is issued its usefulness is practically gone, as nine months' business of another year has completely altered the standing of many offices. They, therefore, recommend that an effort be made to amend this section so that the Blue Book may be issued at a much earlier date than has hitherto been the case.

Penalties and Forfeitures.

The section of the old Act, which will be repealed, dealing with penalties and forfeitures has been considerably added to, partly as a necessity of the foregoing provision in respect of individual underwriting, and partly because of the ridiculous weakness of the old Act in this regard. The Committee sees no objection to the new section (No. 71) but merely draws the attention of the members to it. It reads as follows:

"Section 71. Every person who,—

(*a*) delivers any policy of insurance or interim receipt of; or,

(*b*) except only on policies of life insurance issued to persons not resident in Canada at the time of issue, collects any premium in respect of any policy of; or,

(*c*) *carries on any business of insurance* on behalf of any individual underwriter or underwriters, or on behalf of any life, fire or inland marine insurance company, without the license provided for by this Act in that behalf . . . . . shall on summary conviction before any two justices of the peace, or any magistrate having the powers of two justices of the peace, for a first offence, be liable to a penalty not exceeding fifty dollars and costs, and not less than twenty dollars and costs, and in default of payment, to imprisonment with or without hard labor for a term not exceeding three months and not less than one month; and for a second or any subsequent offence, to imprisonment with hard labor for a term not exceeding six months and not less than three months."

Investments.

Section 64 of the new Act defines the class of investments Canadian companies (other than life insurance companies) may make. Sub-section 2 of this section is entirely new and reads as follows:

> "2. Any such company may deposit outside of Canada such portion of its funds and securities as is necessary to the maintenance of any foreign branch or branches: Provided that all other funds and securities of such company shall be held at the head office of the company or elsewhere in Canada."

The Committee's attention is attracted to the fact that under this section it is open to our Canadian companies to transfer all their funds, over and above the amount required to be kept at home to meet Canadian liabilities, to foreign countries, thus adding to the protection of foreign policyholders at the expense of a less adequate protection to our own people. This point will be more fully appreciated when a later section of our report dealing with "Reinsurance Reserve" has been read. Meanwhile we desire to point out that under Section No. 61 a similar permission is given to

life insurance companies to deposit outside of Canada, but in respect to this class of company there is the following safeguard:

> "Provided that such deposit in any foreign country, for all branches therein, shall not exceed in value the amount, if any, which is required to be deposited by the foreign law, by more than one hundred thousand dollars, Canadian currency."

The Committee believe the interests of the Canadian policy-holders of other than life companies should be safeguarded in a manner similar to the provision above quoted from Section No. 61 and recommend that they be authorized to urge the adoption of a similar clause to Section No. 64.

The Committee is further of the opinion that in the annual reports of the companies to the Dominion Government as provided in Sections 30 to 36 inclusive, it should be clearly and specifically stated where and how the assets of the Company are deposited, the same being divided into the states or countries in which same are held, and they recommend they be authorized to endeavor to secure the necessary amendment to this section to bring this about.

Reinsurance Reserve.

The new Act provides a radical departure in regard to this feature, and as it involves a technical subject the Committee must at the outset apologize to the Council for the space that must necessarily be taken in its treatment.

The stability of a fire insurance company is very largely gauged by its surplus. What this surplus consists of differs already in the United States and in Canada. The new Act greatly accentuates this difference and the safety line in Canada is materially lowered.

In the United States the rule is that a company's capital, as to the insured, is a liability; therefore the surplus must be over and above the capital. In Canada the capital is not considered as a liability and therefore the surplus need only be the difference between the assets and the liabilities. In the United States the capital must always be intact and unimpaired, or the company must cease to do business; on the other hand, in Canada a company may have lost 95 per cent. of its capital and it may yet continue to accumulate larger liabilities. It is necessary we should briefly explain that a company's liabilities consist of

1. All unpaid claims;
2. All unpaid accounts;
3. Reinsurance reserve.

The last item is of course the largest and most important factor. The term "reinsurance reserve" means, according to the Act, "the reinsurance value of a company's outstanding risks." In other words, fire insurance premiums are paid in advance and the companies are merely trustees thereof until the last hour of each policy has passed; a company can only call its own, on any given day, the proportion of the premium it has actually earned for the number of days the policy has run; the balance belongs to and may be claimed by the insured and it is by no means uncommon for the insured, in making his own balance sheet, to count as a liquid asset the unexhausted portion of the premiums he has paid in advance. The reinsurance reserve is therefore the accumulated unexhausted portion of each policy at a given date, and is thus a trust fund for a special and particular purpose.

It is therefore manifest that the capital of a company and its surplus over and above all its liabilities is the security offered to policy-holders to meet losses sustained, either singly or in a conflagration. It must be equally manifest that *as a general rule* a company with a surplus over and above its capital offers to its policy-holders greater security than does a company with a largely impaired capital even although it has a surplus over all its liabilities. We think a concrete illustration of the difference in the treatment of a company in the United States and Canada will more readily explain the situation and make more understandable the additional advantage the new Act proposes to give to Canadian companies at the expense of still further reduced security to Canadian policy-holders. The cases we cite are not suppositions but actual, and are taken from the last issued Government Returns.

United States Standard.

Total Assets		$5,817,423
Liabilities—Unpaid losses and other Claims	$ 318,272	
Reinsurance Reserve	3,380,757	
Capital paid up	1,000,000	
		4,699,029
Surplus		$1,118,394

Security to policy holders,	
Capital	$1,000,000
Surplus	1,118,394
Total Security	$2,118,394

Present Canadian Standard.

Total Assets		$3,594,731
Liabilities—Unpaid Losses	$1,062,858	
Sundry other claims	309,932	
Reinsurance Reserve	2,217,361	
Capital paid up	2,500,000	
		6,090,151
Impairment of Capital		$2,495,420

Security to policy holders,	
Capital paid up	$2,500,000
Less impairment	2,495,420
Total Security	$ 4,580

A Lower Standard.

Under the *new* Insurance Act it is proposed that for the purpose of the Government Report (that is the official standing of the company) a Canadian company may calculate "its liability in respect of *all* its outstanding unmatured policies at 80 per cent. of the unearned premiums computed pro rata as at the date of such statement."

The effect of this change in the calculation of the Reinsurance Reserve in the case above cited would be to *reduce* the impairment of capital to $2,051,949 and *increase* the security to the policy-holders to $448,051.

It would almost seem as if the design of the new Act was to give a fictitious showing to three or four companies whose capital is now almost completely wiped out.

Taking this cited case as bearing upon the paragraph relating to investments abroad, unless a limit is placed upon the amount that can be deposited in a foreign country, there would seem to be no impediment to the Company taking advantage of our own lowered standard and transferring some portion of the nominally and gratuitously increased surplus to a foreign country, adding to the security there and by so much reducing the security to our own people whose protection under the existing standard is so much lower than the people of the United States get under their existing laws.

The Committee do not think it necessary to more than refer to the fact that foreign companies licensed to do business in Canada are not given the same benefit as Canadian companies under the new Act, a fact they are quite capable of themselves taking care of.

Fortunately in Canada we have not suffered from any conflagration such as those that happened in earlier times at Chicago and Boston, or in later times at Baltimore and San Francisco. But who can prophesy when disasters of comparatively equal magnitude will overtake us. From the far East to the far West our cities are growing with rapid strides, and aggregations of value are multiplying to such an extent as to leave no room for doubt but that serious conflagrations will sooner or later overtake us. It is scarcely likely that if the 20th century is Canada's the experience of the 19th century in respect of conflagrations will be altogether averted. Yet in the face of this startling probability the new Act proposes to lower the safety line of our insurance companies rather than taking the prudent course of raising the standard so that at the critical time, when it comes, if it does, the people who suffer may look for the full payment of the obligations contracted by those companies which have granted them protection.

Of fifteen companies organized in Canada and licensed by the Dominion Government, according to the return of 31st December, 1906,

1	has a	surplus	of	over	$400,000	and under	$500,000.
1	"	"	"	"	300,000	" "	400,000.
7	have	"	"	"	100,000	" "	200,000.
3	"	"	"	"	50,000	" "	100,000.
3	"	"	less	than	20,000.		

How many of these companies would pay one hundred cents on the dollar if Halifax, St. John, Quebec, Montreal, Toronto, Winnipeg or Vancouver met with a disaster covering the area of a Baltimore or one-fourth of the area of a San Francisco fire ?

Statements have been submitted to the Committee showing the losses incurred by companies in the Baltimore and San Francisco fires and the effect thereof upon the companies which were involved, and, after studying them, the Committee is strongly of the opinion that the interests of our manufacturers in congested districts, and of the insured generally, are not only prejudiced by the proposal of the new Act but that it is quite time our Government should look into the future and raise the standard of efficiency rather than lower it, as is now contemplated.

The above is the report of the Insurance Committee to the Executive Council of the Association at its Hamilton meeting on Jan. 16th, 1908, when the recommendations were unanimously concurred in. The following resolution was also passed :

The Executive Council of the Canadian Manufacturers Association places itself on record as unalterably opposed to the lowering of the Reinsurance Reserve computation by Canadian companies as proposed in Sections 136 and 137 of the revised Insurance Act, and in view of the serious disasters that have overtaken the people of the United States at Baltimore and San Francisco, within the last four years, whereby many fire insurance companies defaulted in meeting their just obligations to the great loss of those who were involved in the disasters, believes the time has come when the interest of the whole people of Canada should be safeguarded against similar contingencies *by controlling the aggregate liabilities undertaken by the companies in the congested areas of large cities*, a gradual increase in the cash capital, and that such capital should be over and above all liabilities as additional security to the policy-holders.

The Council request the Insurance Committee to give full force and effect to this resolution, and also to the other recommendations of the report.

WILL PROTECT OUR FORESTS.

The staff of the Forestry Branch of the Interior Department has been greatly strengthened by the appointment to the position of Inspector of Forest Reserves of Mr. A. Knechtel, lately the forester employed by the New York State Forest, Fish and Game Commission. This is but one step in the direction of enlarging and strengthening the staff of the Forestry Branch, which is being done as rapidly as trained men become available. It is also a good example of the fact that the tide is turning in the direction of Canada, and that Canadians who have gone over to the United States are finding that Canada is now offering greater opportunities.

Mr. Knechtel is a native of Huron County, Ontario, where he helped to clear his father's farm. He taught school for a number of years in Canada and afterward in the United States. He completed the four years' agricultural course in the Michigan Agricultural College and graduated with the degree of Bachelor of Science. His forestry course was taken at Cornell University, where he received the degree of Forest Engineer from the New York State College of Forestry.



Mr. A. Knechtel.

While teaching school and attending college he spent his vacations looking after the work in a saw-mill owned by him in Muskoka.

After completing his course he was first employed by the United States Bureau of Forestry in making a study of the natural regeneration of the commercial trees of the Adirondacks. Since that time he has been the Forester for the Forest, Fish and Game Commission for New York State, under direction of which he made a classification of the forest lands of the State, established forest nurseries, superintended the planting of 2,500,000 trees in the Adirondacks, organized the work of collecting forest tree seeds, and took charge of the fire protective service.

In 1904 he made a four months' tour of Europe, visiting France, Germany, Austria, Switzerland and Italy, studying and photographing the forests.

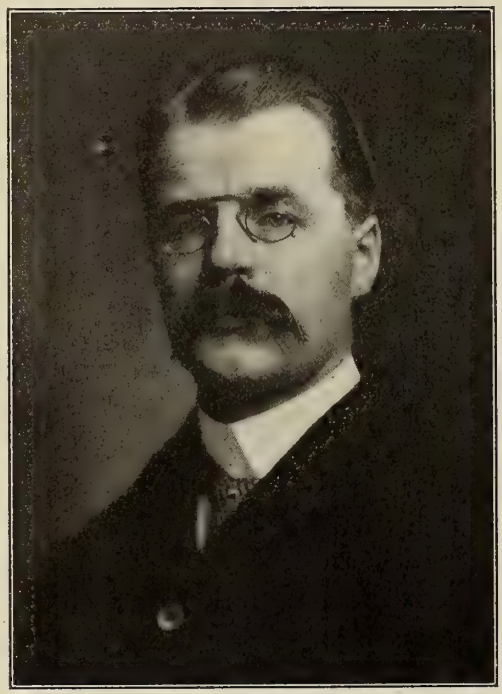
Mr. Knechtel has published a number of bulletins and articles on forestry subjects. Some of the more important are: "The Cultivated Forests of Europe," "Methods of Estimating and Measuring Standing Timber," and "Making a Woodlot from Seed."

Manufacturers Dine at Hamilton

Executive Council Meeting Followed by Successful Banquet

SELDOM outside of a C. M. A. convention has there been such a representative body of manufacturers gathered together as there was at Hamilton to attend the Executive Council meeting and the succeeding banquet on Thursday, January 16th. President Rolland led the invasion in the morning, the main contingent followed from Toronto at 1.15 p.m., and skirmishers for the banquet kept dropping in at all times and from all directions, during the afternoon. Much business was transacted at the afternoon meeting, a full report of which will be found in the last section of this paper.

Of the evening proceedings, much can never be told. It is impossible to transfer to paper the genial influence which the chairman, Mr. R. Hobson, spread throughout the banqueters. Never was such hospitality shown as was everywhere in evidence, from the opening of the reception in the handsome parlors of the Hotel Royal, to the last farewell as the



Mr. C. C. James,
Deputy Minister of Agriculture.

guests joined in singing "Auld Lang Syne." Those who had the good fortune to enjoy the hospitality of the people of Hamilton last September expected a warm welcome, but the excellence of the entertainment outdid anything which had been anticipated.

The banquet was notable in the annals of the Canadian Manufacturers Association for a number of reasons, but chiefly because it provided the opportunity for presenting Mr. Harry Cockshutt, President of the Association for 1906-1907, with a remarkably beautiful painting by a Canadian artist, as a mark of the Association's appreciation of his good work during his year of office. While the great strides in influence and usefulness which the Association made during his presidency must ever be Mr. Cockshutt's chief source of satisfaction for the time and work he devoted to it, it will be a pleasure to him to know that his efforts were appreciated. The spontaneous outburst of applause which greeted him on rising to thank the members left no doubt as to the position he occupied in their regard.

The menu which was provided by mine host of the Royal ran the whole gamut of seasonable delicacies. It was well planned, nobly served, and appreciatively partaken of. Additional point was given to the various dishes by the local touches appearing on the menu, all of which provided much amusement for the banqueters.

While the dinner was still in progress, Hon. J. D. Rolland, who had to leave to catch a train, addressed the gathering, and ended by offering on behalf of the Association to set up a brass tablet in the Commercial Club, setting forth the facts pertaining to the opening of that club, which took place during the entertainment of the Association in Hamilton in September last. The gift was gracefully received on behalf of the club by Mr. Hobson. The President was then escorted to the door with much applause. After dinner a couple of hours were given over to speech-making. The toast of the King was proposed by the chairman, Mr. R. Hobson, and was duly honored. Canada was eulogized by Mr. McClemont, in proposing the toast of "Our Country." He especially referred to the work being carried on by the Canadian Clubs, the idea of which originated with Mr. C. R. McCullough, of Hamilton.

Agriculture and Manufactures was proposed by Mr. Cyrus A. Birge, and responded to by Mr. C. C. James, Deputy Minister of Agriculture for the Province of Ontario. Mr. James pointed out the impossibility of comparing any two industries in respect to the amount of benefit they were to the country, since the work they accomplished was mutual, each being necessary for the well-being of the other. He then spoke of the advance of agriculture and its allied industries of dairying, stock-raising, etc. The farmers benefited manufacturers in three ways. They supplied raw material; they provided a market for produce; they provided capital for industries. Mr. James described the progress of farmers, how as pioneers they had hewn out a clearing in the virgin forest and planted their grain crops, how the value of stock became evident and this became a feature of farming, later came the era of dairying, butter and cheese-making, and fruit raising. Side by side with the advance in farming went an increase in profits, so that last year the farmers of Ontario had produced beef, butter and cheese to a value of $35,000,000 more than they did eight years ago. This sum, the speaker pointed out, was widely distributed, and being deposited in the banks, had provided capital for many manufacturers.

Agriculture formed a perpetual source of revenue. The forests, when they were cut, were not reproduced. The mines, when the metal was taken from them, were valueless. But the land could be made to yield year after year, with unabated productiveness. However, if the supply was to be increased the farmers must copy the manufacturers and adopt business methods. If they wanted to make bigger profits they must see to it that there was no wasting. And lastly, the most up-to-date machinery must be employed by the modern farmer if he wished to get the best results from his occupation. He gave as an illustration of what could be done by studying the science of farming some figures of the returns from cows and land belonging to the Guelph Agricultural College. An improved output, he said, could only be arrived at by a close attention to the best methods of treatment of animals and land. There should, therefore, be a good deal more specializing done by farmers than at present, and training along this line should be provided. No one asked a lawyer to practice

first and get his legal education afterwards, and the only way to make competent farmers of the younger generation was to train them when young.

The Presentation.

Mr. R. J. Whyte then presented, on behalf of the Association, a water color painting, entitled "Passing Clouds," to Mr. Harry Cockshutt. Mr. Whyte dwelt on the importance of the industry which Mr. Cockshutt represented, and spoke in terms of high eulogy of the work the past president had accomplished for the Association and for Canada.

Mr. Cockshutt expressed the great pleasure it had been to him to serve the Association as President. The Association, he said, was doing a work not only for themselves, but for every element in the country. They provided a home market for the farmers, they provided the articles without which the farmers would be unable to carry on operations. They supported a great industrial army of workers. Mr. Cockshutt also thanked the Hamilton members particularly for their entertainment, which was ever the means of attracting Brantford citizens to that city, when things were not going right at home.

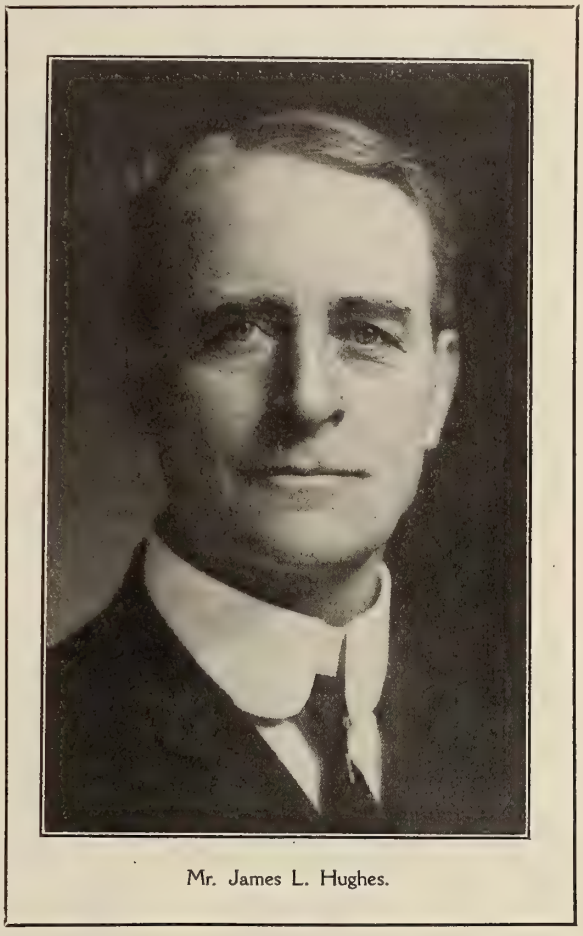
Industrial Training.

The toast of "Technical Education" was introduced by Mr. C. R. McCullough, who in a few words spoke of the vital importance it was to the national welfare. He coupled with it the name of Mr. James L. Hughes.

Mr. Hughes made a strong plea for a truer appreciation of the needs of the boy and girl. He pointed out that the natural instincts of the child was to do things, to build and play with material things. This natural tendency should be developed. It was not sufficient to load a child up with knowledge; it was just as essential that he be taught how to use that knowledge, how to exercise to advantage the natural aptitudes with which he had been endowed. The working man surely had the same right to train himself in his life's work as those who were to follow the higher professions. He must be educated to think for himself, and not be a mere imitator. That nation was richest which added most to its capital, and that nation which had a system whereby men were taught to turn a piece of shapeless clay, costing a dollar, into a vase worth five dollars, was adding to its capital. Train men to do this and wealth would multiply much quicker than it would by the advance of the farming industry, though he did not wish to speak disparagingly of that business. The nation which would pull the trade of the world must make useful and artistic things. When we had so much raw material in the country it behooved them to establish some sort of an educational system whereby our young men could learn to make it marketable. The speaker closed by congratulating Hamilton on the fact that it would soon be a centre of the new development in modern educational methods.

On Behalf of Organized Labor.

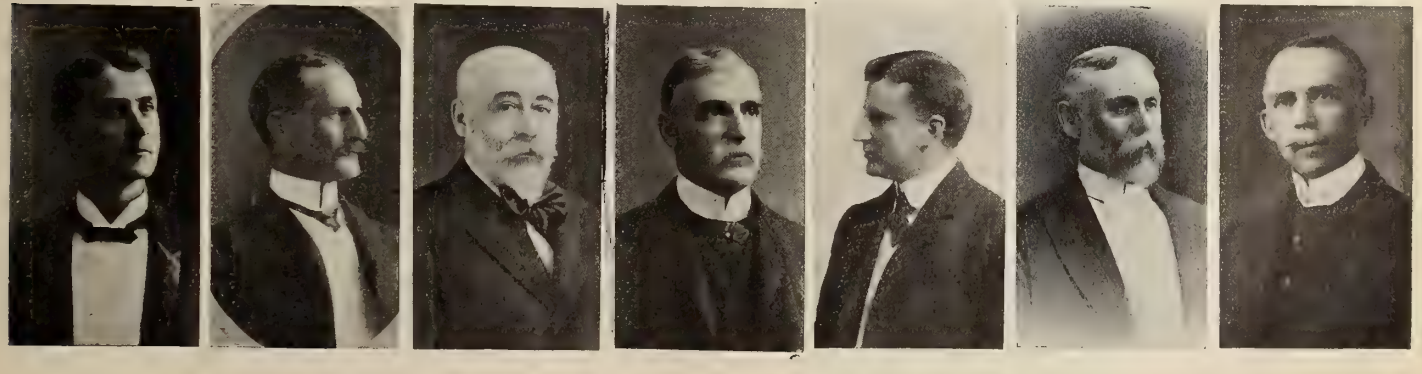
The chairman then called on Mr. C. G. Bird, who was present as the guest of the Association. Mr. Bird, who is the President of the Trades and Labor Council for Hamilton, stated that labor conditions in Hamilton were uniformly satisfactory. He believed that only when there was harmony between employers and employees would the best results to both be attainable. Mr. Bird's remarks were well received.



Mr. James L. Hughes.

The healths of the chairman and the committee who aided him were proposed by Mr. G. Frank Beer, and enthusiastically drunk. During the evening musical numbers were contributed by Messrs. Harold Hamilton, A. L. Garthwaite, and Edwin Skedden. Mr. Ed. Grey contributed a humorous monologue. An orchestra from the 91st Highlanders played throughout the evening.

The committee who had charge of the arrangements consisted of Messrs. R. Hobson, W. R. Dunn, C. R. McCullough, J. W. Lamoreaux, J. R. McMahon, and W. B. Champ.



The Solution of Labor Troubles

How the Industrial Disputes Investigation Act has operated during the ten months it has been in force

FEW measures which have ever been adopted by the Canadian Parliament have created such wide-spread interest as has the Industrial Disputes Investigation Act, passed last session. It represented an effort, an original effort, to bring about a solution of the differences which continually arise between workmen and employers without the use of the ruinous agencies of strikes and lock-outs. During the brief time that the Act has been in force, Boards have been appointed to investigate a wide range of differences, extending from one end of Canada to the other and embracing many lines of industry, and while every new dispute introduces new features, yet the general tendencies are now fairly definitely marked. The following discussion, from an address by Mr. G. M. Murray, Secretary of the Canadian Manufacturers' Association, before the National Civic Federation at New York, will show the way in which the Act has worked out :

The Scope of the Legislation.

The Canadian Industrial Disputes Investigation Act applies to what are known as public utilities, including steamship and railway companies, telegraph and telephone companies, power, gas, and light companies, and coal mines. When the bill was introduced into Parliament for discussion last Winter our Association, through its Parliamentary Committee, studied it very carefully and followed its progress through the House with considerable interest. We preferred, however, to take no stand one way or the other on the bill at that time seeing that it did not affect us directly, but to defer making any representations whatever until we should have an opportunity of watching how it worked out in the narrower sphere to which it was proposed to limit it.



Kept Apart.

Generally speaking, the verdict of employers, so far as I have been able to gather, is favorable to the act. There are, of course, some exceptions, to which I will make reference later, such as the longshoremen's dispute in Montreal and the several disputes of the Western coal miners, but the consensus of opinion, even where everything did not go the way the employer wanted it, seems to be that the act on the whole is a very good thing.

Hasty Action is Deferred.

In the first place it defers hasty action on both sides, always provided, of course, that the act is observed. It prevents hasty action by stipulating in section 56 of the act that pending the reference of a dispute to a Board of Investigation there shall be no strike or lockout on the part of employees or employers ; further that pending the investigation of the matter under dispute by such a Board there shall be a continuance of operations under the conditions then existing. Speaking from the employers' point of view, therefore, this makes it impossible for a grievance committee to wait upon you in the morning with a long list of demands which you must accede to at once on pain of having your entire staff called out within twenty-four hours, for all you have to do under these circumstances is simply to make application under the Act as provided in sections 15 to 19 and to file a copy of your application with the grievance committee. Then if they proceed with the strike, they are liable individually to a fine of $10 to $50 a day during the entire duration of the strike.

Now, Mr. Chairman, I am one of those who firmly believe the average working man is a decent fellow if you only treat him right. Perhaps some of you older gentlemen who are present will shake your heads and say that this is the sort of wisdom that is born of inexperience, but as Secretary of the most powerful organization of employers in Canada I have knocked against all sorts of workingmen and I am happy to say that in the vast majority of cases I have found them likable fellows who will do right if they are done right by,—provided no undue pressure is brought to bear upon them.

Action Usually Governed by Minority.

In conversation the other day with one of the coal mine employers affected by the act in Western Canada, he made the rather startling announcement that in his district, while the workingmen were nearly all members of the union, not more than 10 per cent. of them attended union meetings. This went to confirm a suspicion that I have long had that the policy of the union is largely dominated by a very few members. It is unfortunately true in the majority of cases, if we can believe half of what we hear, that this policy is dictated by men of extreme and radical views and the unions are all too frequently precipitated into striking against the better judgment of the more sober-minded of their members.

Difficult to Secure Snap Verdict.

Now under the Canadian act it becomes a matter of considerable difficulty for agitators in the Union to obtain a snap verdict to strike, particularly if the object is to call for an investigation under the act, because the act stipulates in Section 16 that an application for an investigation by the Board must be signed by two of its officers duly authorized by a majority vote taken by ballot of the members present at a meeting called for that purpose at not less than three days' notice. So far as the men are concerned, therefore, the act is well calculated to postpone hasty action.

And even when the decision to strike is arrived at, should the men not wish an investigation, the employer may make application for a Board of Investigation, thus ensuring a continuance of the work under existing conditions for a period which cannot very well be less than thirty days.

The Effect Reciprocal.

Employers are equally debarred from aiming sudden blows at labor, for the act requires that in every instance they shall post a notice thirty days in advance of any intention either to alter the rate of wages or to alter the hours, so that in the meantime the union have ample opportunity to discuss the matter and find out whether or not they wish to make application for a Board.

Not an Arbitration Act.

This then, as I take it, is the first and one of the main advantages which we may point out under the Canadian act, that is to say, it defers hasty action. The second point that I wish to make is that in no sense of the word is the Canadian act an arbitration act. It is purely and simply an investigation act.

I need not remind you that the best law ever enacted may fall far short of accomplishing what was anticipated for it if its administration is entrusted to incompetent men or to men lacking in tact, and it is significant that one or two somewhat glaring instances where the word failure has had to be written across the act in Canada are explainable by the fact that the Boards of Investigation clothed themselves with too much formality, conducted their investigations as they would in a court of law, called on each side in turn for a statement of its case, giving the other side an opportunity to reply, took all the evidence under oath and in the presence of a court stenographer, and then sent the disputants away until they could sift out the evidence themselves and arrive at what they called an award. Such a course might be all right where the disputants are not required to meet again, but where they must continue relations as employer and employee, the only course, it seems to me, is to find some neutral ground upon which both can stand, a ground which will permit of harmonious working relations and be mutually satisfactory to both parties.

Now I have the greatest respect for the Canadian judiciary and for the high prelates of the church, but I maintain that such functionaries are not as likely to effect an amicable settlement under this act as others who might be selected, and without wishing to cast any aspersions whatever upon them, it is only right to remark that the most signal failures of the act have been where such personages presided over the boards of investigation.

A Model Procedure.

On the other hand, let me picture to you the procedure in those investigations conducted by Professor Adam Shortt, of Queen's University, Kingston. This gentleman has had the honor of presiding over no less than four investigations under the Act and with a degree of success which I regard as quite remarkable.

To begin with, we have an ordinary business office or committee room, with a long table down the centre. No witness box, no platform and nothing to suggest the formality of a court. First of all, the board enters and seats itself at one end of the table; next the men appointed to represent the employees arrange themselves along one side of the table and the representatives of the employers take seats along the other side. The chairman of the Board makes a few introductory remarks, during the course of which those who feel inclined to smoke can light up their pipes, and then the spokesman of the party that has made application for a reference of the dispute to a board states his case. This man is not a lawyer, because lawyers are debarred from these proceedings, but he is a man who is probably well known to every one present and who uses language entirely devoid of legal phraseology, which only serves to befog the ordinary layman.

A Conversational Discussion.

After he has had his say the spokesman for the other side is called upon to state his case, and after he has replied in kind the whole matter is opened up to conversational discussion. There is no court stenographer present to take down every word that is said. There are no reporters of the press present to feature the angry retorts which are sometimes made, and which, if given publicity, would only prejudice the side giving utterance to them. No one gives evidence under oath, though he may be required to do so if the board suspects him of misrepresentation. If a man makes an indiscreet remark he is allowed to modify it or take it back entirely, and the public get only so much of that meeting as the chairman chooses to give out.

When the act was being discussed in the Canadian Parliament, one of the points upon which most emphasis was laid was that the press would be present and the public would be given an opportunity of deciding which side was right and which was wrong. Now, while it is true that the board is instructed under the act to admit the press, unless there are matters under discussion which they think it unwise to give out, the practice of the boards over which Professor Shortt has presided has been to exclude the press, and I think he has clearly demonstrated that by giving out only so much as is wise to give out, consistent with a full discussion of the subject, public opinion will readily mould itself along the proper lines without engendering bitterness on either side.



Brought Together.

It is easy to see therefore, how, under the directing influence of the clear-headed man who is not above mingling with all parties on terms of equality, very material progress may be made towards inducing both sides to abandon all extreme or unreasonable attitudes.

Advantage of Outside Conciliator.

And here let me say a word in favor of the outside conciliator who happens to be vested with a certain amount of authority by the Government. Hot-heads there undoubtedly are on both sides, and these men by their very hotheadedness so frequently provoke and antagonize their opponents that even excellent suggestions looking to an amicable settlement of the difficulty are likely to be turned down if emanating from one who is a party to the dispute. If coming from an outside party, however, particularly one who has established himself in the confidence of both sides, the chances are they will be immediately adopted. Let me give you a case in point.

The work-people engaged in a certain line of trade which will be nameless recently applied to their respective com-

panies for an increase in wages of about 20 per cent. There were four employing companies affected and in all some three thousand working men. A board was appointed to investigate, and it was agreed that the companies would be taken up separately. The investigation of the first company's affairs resulted in a compromise whereby the workmen accepted an increase of 14 per cent. instead of 20. Companies numbers two and three immediately accepted this decision, but company number four objected to it most strenuously. They said, No; we cannot afford it. This contention, of course, was met with a storm of protests on the part of the working men, who voiced their sentiments in language which was more forcible than parliamentary. The chairman, however, happened to have some intimate knowledge of the finances of the company in question and felt that their point might be well taken. He adjourned the board for two or three days to make investigations on his own account. When they met again he went into a statement of the case with the men; he explained to their entire satisfaction that owing to the somewhat restricted earnings of the company they were not in a position to advance their wages 14 per cent.; he showed that 10 per cent. was as far as they could possibly go, and told the men that that was as much as he, as chairman of the board, could recommend to be adopted.

The answer of the men was significant. They said, "Well, Prof. Shortt, if you state that a 10 per cent. increase is all that the company is able to pay, we are willing to accept it, but we would never have taken a statement of that sort from the company."

Influence of Act on Attitude of Capital Toward Labor and Vice Versa.

This brings me, Mr. Chairman, to one of the most important results following the operation of the act. So far as the prevention of strikes is concerned, the act has had its successes and its failures, the former, I am happy to say, largely in the majority; but it is important to observe the effect of the act upon the general attitude of capital toward labor and vice versa, because if we are to arrive at any opinion as to the permanent efficacy of the act we must know what it is that makes it acceptable to the employers and what it is that makes it acceptable to the employees. The case that I have just referred to shows that in one instance at least the union has been willing to abandon its adherence to the rule that there shall be a standard union wage.

I admit that you can point out all kinds of difficulties where you have two companies paying different standards of wages. But the fact remains that the union in that instance accepted a lower rate of wage than their fellow members were obtaining from another company. The principle was propounded by the chairman of the board that the workingmen were entitled to a reasonable increase in their wages so long as the earnings of the company they were employed by justified it, but at the same time he laid down the firm principle that the standard wage in one company need not necessarily be adopted as the standard wage of another company, because each company should be asked to pay only as it was able. True, this is but a single instance of the union abandoning its wage doctrine, but at the same time it must not be forgotten that this is a precedent, and precedents are likely to repeat themselves.

The case of the Cumberland Railway & Coal Company illustrates a strike brought on to effect a closed shop and abandoned by the men when confronted with a public investigation. The assumption is that they considered their case too weak to stand before the limelight of public opinion. Again we have a precedent, this time of a union forsaking its principle of the closed shop. Already this precedent has repeated itself in the case of the Western coal miners, the telegraphers and the railway machinists.

The Question of Promotion.

The observance of seniority in making promotions is one of the rules that the telegraphers have always stood for. This, of course, carried with it the theory that the employee had a right to dictate to his employer in regard to the filling of vacancies on the staff. The telegraph companies took strong exception, and the following dialogue, very much abbreviated, of course, took place between the chairman of the board and the leaders of the men:

"Are you not prepared to make some allowance for the fact that sometimes the younger man is more competent than the one who has been longer in the service?" inquired the chairman.

"No," replied the men; "our rule is that seniority of appointment must be observed and that every man must take his turn at promotion."

"Your union, I presume, has a president?"

"Yes."

"And a secretary?"

"Yes."

"And a business agent?"

"Yes."

"Are these men appointed from among your own number?"

"Yes."

"Have you ever had any suggestions made to you by the bosses as to what man you should put in as your business manager, or as your secretary, or as your president?"

"No, we haven't."

"Would you welcome any such suggestions?"

"No; we would insist on appointing our own men."

"Then why are you not content to let the bosses run their own business?"

This line of argument appealed to the men. They conceded the point and pressed it no further.

Here again we have the establishment of a precedent. I do not know that this precedent has been repeated, but it stands as something to which the union has definitely committed itself, and something which we may expect in other cases to see repeated, because the same line of argument will always hold good.

Some Advantages.

Speaking solely from the employers' point of view, therefore, we have three good reasons why the act is acceptable: First, it has compelled unions to abandon the principle of the closed shop; second, it has compelled unions to abandon the principle of a standard union wage; third, it has compelled unions to abandon the principle that they have the right to nominate the men who shall fill certain positions. To this extent the act has undermined some of the fundamental doctrines of labor unionism, and it is scarcely to be wondered at if employers, who have suffered as a result of the unreasonable demands of paid agitators, regard its operation with favor.

I am sorry we have not some one here to speak for the other side. No bargain is really a bargain which does not benefit both parties, and if the Canadian workingman were present, he could tell you of hours that have been reduced and of wages that have been increased by reason of the investigations under this act. But that I must leave you to learn of from other sources.

Thus far nothing has been said about the weaknesses of the act, but lest you should get the idea that it is a perfect piece of legislation, I feel it my duty to mention one or two points in which it has been tried and found wanting.

Some Difficulties in Enforcement.

In the first place, while the penalties are readily enforceable against employers, it is practically impossible to enforce them against employees. In other words, the employer who declares a lockout may be promptly arrested and fined, but if his workingmen to the number of a thousand go out on strike in violation of the act it is absurd to suppose that they could all be arrested and brought before a magistrate. Moreover, it would be the veriest folly for an employer, who is anxious to get his men back to work, to have some of their number arrested, for such action would immediately make the parties apprehended appear like heroes and martyrs in the eyes of their fellows. Passion would be inflamed, the determination to resist would become strengthened, and the day of settlement would be indefinitely postponed.

The Department of Labor has attempted to smooth this difficulty over in cases where the act has been violated by saying that the men did not understand its terms. But this excuse carries little weight with those who have an intimate acquaintance with the circumstances. Possibly in the case of the Cumberland coal miners the excuse is permissible, but not so in the case of the Western coal miners, for the union men were well aware of the provisions of the act. This fact is admitted in President Elliot's article in *McClure's Magazine*, though, in a subsequent passage of the same article, an effort is made to excuse the men on the ground that they were ignorant of the law.

Again, in the case of the longshoremen's strike in Montreal, which took place two months after the act had become effective, and after the widest kind of publicity had been given to it, the men went on strike in violation of its terms. A Government officer was despatched to the scene to reason with them, but without success, the men replying that they were not on strike, but merely taking a holiday. And yet again we hear the Government condoning the offence of these men by saying that they did not understand the terms of the act.

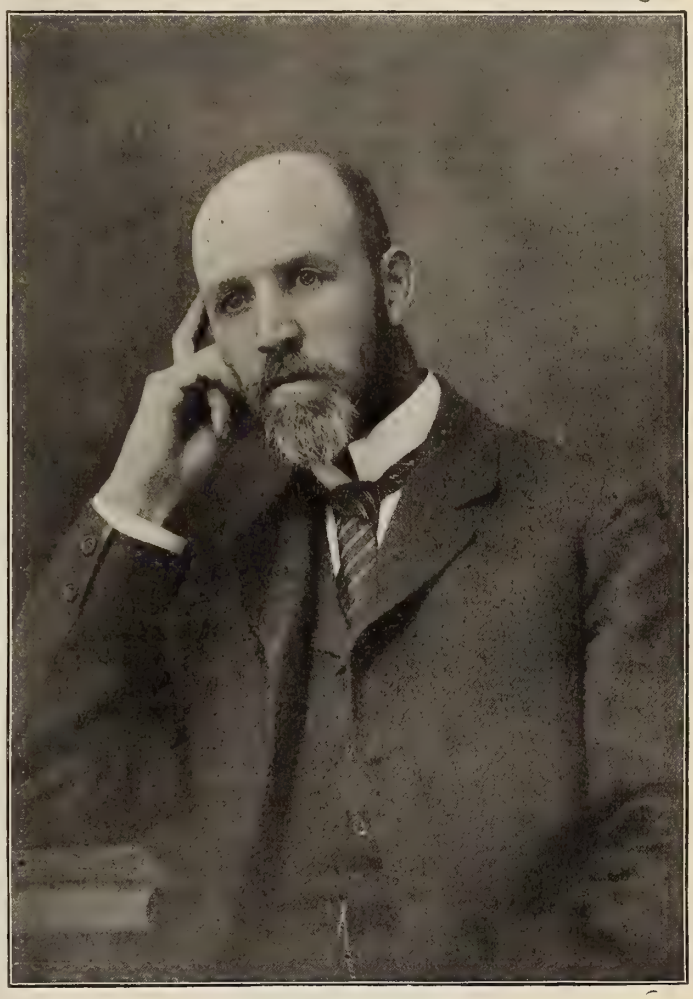
In one dispute out on Texada Island the employer went so far as to have the men arrested and brought before a magistrate, but the magistrate discharged them on the ground that they were in ignorance of the law when they offended.

The only case where an employer has been guilty under the act, so far as I have been able to find out, is that of Mr. Hill, of the Hillcrest Mining Company, in Alberta, who declared a lockout after the men had applied for a board. He was promptly haled before a magistrate and fined $100 a day during the duration of the lockout.

Failures of Act are Exceptional.

These illustrations prove my contention that the act is enforceable as against employers but not as against employees. The cases I have quoted are, however, the exceptions, and not the rule, for, in the majority of instances, there has been no cessation of work pending the investigation of the matters under dispute. And here, too, the important consideration of precedent comes into play. When the act was under discussion in the House, all the unions favored it except the Locomotive Engineers and Firemen and the Railway Conductors. These have since withdrawn their opposition and come out openly in its support, so that the act, as it stands to-day, has practically the unanimous endorsement of all the labor organizations in Canada. They are on record with the public to this effect, and they already feel that it is incumbent upon them to abide by its terms. In most cases they have abided by its terms, and every time they defer declaring a strike, pending an investigation, they are committing themselves more and more firmly to the principles for which the act stands. It can only be a matter of a few years, to my mind, at the very most, when the effect of this chain of precedent will become so binding upon the unions that they will not for one moment consider striking in violation of the act, for to do so would shake the confidence of the public in their protestations of sincerity and lose them the sympathy upon which they so much depend.

There are other weaknesses in the act which I might mention. Once an investigation has been decided upon there is an undoubted tendency on both sides to manufacture grievances, on the assumption that the worst that can happen is to have them disallowed. This results in considerable waste of time, though it seldom proves a factor in blocking a settlement. The clause forbidding anyone who is directly or indirectly interested in either side to a dispute, from serving on the Board of Investigation, is more frequently honored in the breach than in the observance, so far as the representatives of the men are concerned, for they have repeatedly been salaried officers of the union. These, however, are minor matters, which the time at my disposal does not permit me to discuss.



Prof. Adam Shortt,
Chairman of Several Boards.

Notwithstanding the weaknesses I have referred to, I think the employers, even those who have seen their men violate the act, would be sorry to have it repealed. While the penalties may never be imposed, still they stand as a wholesome preventive against rash conduct for the sober-minded man, who is generally in the majority, and so long as they exercise even this deterrent effect employers will regard the measure with favor.

Books for Business Men

A GUIDE FOR INVESTORS.

Mr. John Moody, of New York, has just issued a handy little volume, entitled "The Investor's Primer (pp. 183, $1.62), explaining in alphabetical order the various expressions used in the financial world, *e.g.*, adjustment bond, etc. The author follows this list up with a review of the characteristics of leading railway preferred stock issues.

GENERAL INFORMATION ABOUT CANADA.

Business men should have for ready reference a copy of the Commercial Handbook of Canada, the 1908 edition of which has just come to hand (Heaton's Agency, Toronto, price $1.00). The book contains in concise form a great amount of information which may be required at short notice any time, and, what is of prime importance, the contents are carefully indexed. Among the parts which are of particular importance are complete and up-to-date tariff schedules, including the new French commercial convention, postal and telegraphic information, reports on insurance, transportation, and kindred subjects, etc. As a book of references for those interested in Canadian subjects it is invaluable.

SOCIALISM IN ESPERANTO.

That socialist advocates have been busy scattering literature of later years has been frequently evident. Now a little volume has just come to hand, printed in Esperanto and English on alternate pages, giving Marx & Engels' "Manifesto of the Communist Party" (pp. 65), with its impassioned appeal against existing social conditions. It is well to bear in mind that trade unionism is in theory opposed to socialism. But nowadays, one cannot overlook, unionists are often far from informed on the true basis of their own organization. Trade unionism is based on the system of wage-payments, and the idea that by union workingmen are in a position to secure the best possible wage—that is all. It is not subversive of society—which is more than can be said of many of the labor agitators who, as far as the real interests of workingmen are concerned, are wolves in sheep's clothing.

HOW TO JUDGE MINING INVESTMENTS.

"Mining Investments: How to Judge Them," is the inviting title of a small volume of 230 pages, by Dr. F. C. Nicholas, just issued by The Moody Corporation, New York (price, $1.62). It will be consolation reading for many a person who has been nipped by the mine promoter or the mining shark. It is good stuff for anyone who may sometime wish to take "a flyer" in the mine—for, as the author frankly points out, anyone going into a mining investment inevitably takes big chances, and should look for big prospective returns to counterbalance.

Everything is explained from the initial organization of a mining company to its marketing and developing. A survey is also made of the mining regions of the world, of the trials of a mining engineer and the speculator, etc. Tales are told of the making of millions, and of the loss of millions by late investors.

Everywhere it is true that people often go into mining investments with less thought than they would to a good dinner. Against this lack of consideration the author protests and urges that adequate study of prospects, property, and the character of those in charge would lessen greatly the widespread losses now met with. It is a book that is worth many times its small cost.

MUNICIPAL PROBLEMS.

A book of great value to the man who is interested in civic questions has just been issued by the Librarian, University of Toronto, under the editorship of Mr. S. Morley Wickett, under the general title of "Municipal Government in Canada." The Book contains a series of papers on local government and civic administration in the Yukon, British Columbia, the Maritime Provinces, Newfoundland, Montreal, and Ottawa. A comprehensive discussion of present municipal problems is given in the paper on Present Conditions. The volume is rounded out with a most complete bibliography of the subject.

In all cases our municipal government is an evolution. Even the biggest of our present centres of urban population began as small and unassuming villages, where franchises were little thought of, and where expenditures passed under the eye of every burgess. The problems that confronted such a settlement were insignificant. But in the course of time bigger problems kept forging to the front, and the point is driven home time and again, in the book before us, that the machinery of government has not been brought into harmony with the new conditions. This is shown in the difficulty Montreal has had in raising sufficient funds to carry on the business of the city adequately, in the hardships the same city has undergone in provincial and federal interference, and in the piece-meal legislation which is constantly resorted to in Ontario to supply defects in municipal charters.

The writer summarizes the conclusions arrived at in his able analysis of present conditions, by advocating specifically wider local powers than are now customary under municipal charters; a municipal board for purposes of supervision and consultation; improved and uniform system of bookkeeping; a standard form of debentures; a longer term of office for councillors; more efficient service from heads of departments, and extension of the municipal franchise to incorporated companies.

If citizens can be aroused to a sense of responsibility for the welfare of the municipality in which they live, the good government of the whole country is assured. The greatest danger of a democratic government consists in the tendency among the mass of people to shift that responsibility to the shoulders usually of those who are mercenarily interested. Even in the weakest or corruptest of communities the great majority of the citizens are honest and intelligent. In every city and town there are some individuals who stand out pre-eminently for ability and straight dealing. With a proper combination or co-ordination of these two elements, an honest electorate and able leaders, there is no reason why even the larger problems which are now before municipal councils should not be dealt with in the best interests of the people at large.

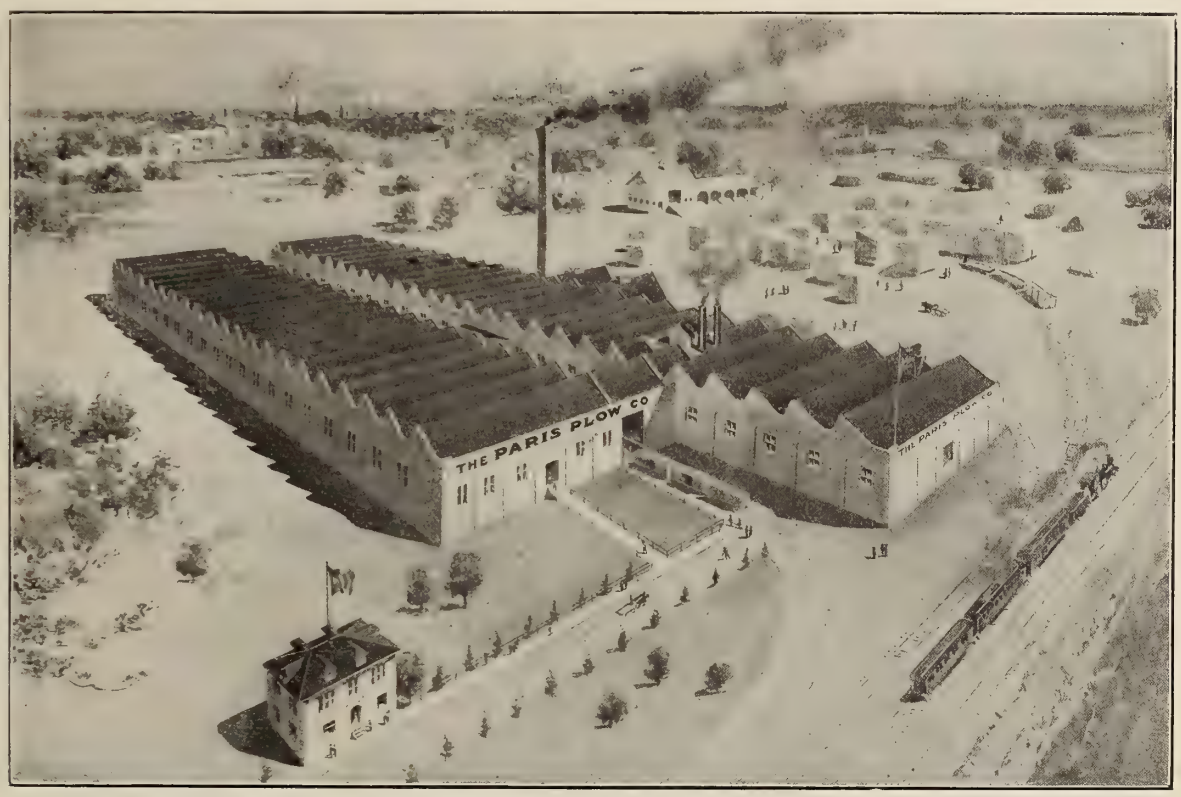
R. D. Isaacs, who is organizing a car manufacturing company, has made a proposition to the city of St. John, N.B., looking to the establishment of the works there. The company will be capitalized at $1,500,000. The city has been asked for sixteen and a half acres of free land, exemption from taxes for twenty years, and the guarantee of bonds to the extent of $200,000.

Hints for Factory Construction

By D. C. N. Collins

MANUFACTURERS have, sooner or later, to face the problem of plant extensions or the construction of a new plant. They do not want the cheapest building possible, but they do want the most suitable one for the least money. The first consideration is economy in production; any means for saving labor or increasing production will be of permanent value; any obstacle to these ends will cause a steady loss.

The writer was recently called upon to look over an old plant and found an entire absence of railway connections and a corresponding annual cost of $5,000 for trucking alone. Throughout the entire plant there was a waste of labor in carrying heavy material back and forth during the various stages of manufacture. The trucking expense of $5,000 would pay 4 per cent. on $125,000, which was practically the cost of buildings in a new plant, while every advantage in labor saving devices and economy in operation in a new plant was clear gain.



Example of Saw-Tooth Construction, by which the Maximum of Light is Secured.

It requires $20,000 invested at 4 per cent. to maintain one man in service at $800 per annum. If his capacity can be doubled it means an equivalent to the increase of that amount in working capital. The cost and control of labor is a complex and important matter in all industrial improvements. The growing difficulty is not only to get good labor, but to hold it. To study the mental and physical condition of men is really more important than the careful adjustment and lubrication of machines.

Cost is the Vital Point.

Factory buildings are not a matter of pleasing effects nor of fastidious decoration. They do not come under the classification of architecture as it is generally understood. This class of work is the offspring of a cold commercial computation of dollars and cents. How much will they earn and how much will they cost. An industry should be made co-operative in every detail, the mechanical and human equipment and the buildings make one homogeneous unit. The manager who is responsible for the expenditure of large sums of money has a responsibility upon his shoulders sufficient to warrant the expenditure of a small portion of it in skilled and experienced engineering ability.

The birth of an enterprise should be attended by a comprehensive and clear preliminary study of all points, made with an intimate knowledge of values and costs so as to present the proposition in clear shape for criticism, for discussion and for proving the amount of appropriation necessary to launch it successfully. Too often is an owner influenced to begin an important improvement with insufficient funds to complete it. With the preliminary report accompanied by reliable estimates and information to provide a convincing check upon extravagance and error, an owner knows where he stands and is in the strongest possible position to decide intelligently when to begin spending money.

Information to be Secured.

After general plans are perfected the administration aims to secure their accomplishment for the least money. This means close planning to do the work with the least material, to decide upon material cheapest and best for the purpose, to establish just how much material will have to be purchased and to buy it right. The foundation of all good buying is broad competition on definite quantities and qualities of

material. Every contractor and material dealer has his own idea of successful business policy and it is seldom that one permits a loss to himself. Very few of them will quote bottom prices until they see positive evidences of an immediate sale unless it is in the preliminary stages of the work, when they may make their quotation attractive, knowing that the records do not bind them to any definite requirements.

Contractors Should Have Details.

A request to bid in competition is, virtually, a challenge to beat the other fellow, and in getting his price where the owner wants it, he is simply complying with the essence of the inquiry. This does not reflect upon the honesty or integrity of the contractor or material dealer. Every firm is measured and respected by its success in securing business at profitable rates. This merely points out the importance of establishing exactly what is to be done and how it is to be done before getting prices; uncertainties that add to the probable cost of the work should be eliminated and definite quantities fixed, so that each bidder will start on an even footing, and the work can only be controlled by price. It is even more necessary in order that the owner can control the delivery of the material and that he can feel sure that he is receiving full value for his money and that he may know that the accepted prices are right.

Plans and specifications are the sole technical and legal basis of adjustment in an exchange of money for building material delivered. If they are indefinite or incomplete, so will the results be. They are useful in analyzing market conditions and indispensable in compelling the proper delivery of material.

Real Competition.

A few thoughts on the ethics of contracting, as of recent practice, may illustrate the wisdom of a proficient handling of purchases. Many owners seem to think that competitive prices on a flat building of certain dimensions, without plans and specifications, satisfy all demands of competition without regard to the uncertainty of how much material each bidder includes in his estimate and without appreciation of the helpless position he would be placed in should he need to compel its proper completion. It is easy to place a contract, but much more difficult to feel sure that you get the value of payments on the work. Not knowing in detail what the contractor is buying or what it should cost, the manufacturer merely accepts the lowest bid and assumes that the price is right.

It has been the custom in many quarters to ask steel companies to estimate upon a building of fixed size, that contains steel, each quoting a price according to its own design. In such a case each is bidding upon a different thing, and there is no real competition at all; they give very little data upon which to make a comparison. About all that is known is that "so and so agrees to put up a building for so much money, and he is the lowest bidder." The owner pays thousands of dollars for a thing and does not know what it is.

The first question would be, "Does he include everything?" A conscientious man who figures on giving everything required, will not likely be the lowest bidder, while the one who figures on "skinning" the weight, or can arrange to run in some of it as an "extra," can well afford to bid low. An important question will develop here as to whether a steel contractor, probably located at a distance, can drive piles, lay brick, excavate or do other work as cheaply as local people can who have a local acquaintance and organization.

One thousand tons of steel at $100 and two thousand tons at $50 amount to the same thing. Suppose, for illustration, that a building could be designed closely so that this 1,000 tons would answer all purposes and our record shows the exact amount in detail; we can invite the same bidders to bid on this fixed amount and secure the $50 bid, thus cutting the price in two.

General contractors, who bid on the entire work for a lump sum, do not always do every trade with their own men, and, consequently, will get sub-contractors to estimate on their special trade for them. They add these various amounts to their estimates on their own work, add their profit to the total, and send in this bid. In this way the profits are doubled up; each contractor has a cost and a profit, and the general builder adds his profit to the total, and the only work that is done at cost is the particular branch that he is equipped to do with his own men.

Percentage Contracts.

Some owners favor the percentage form of contract in order to overcome the possibility of excessive profits and to permit of convenient changes being made during erection. In this method the work is done at cost and the builder charges a fixed percentage of the total cost as his profit. This form of contract has many indefinite results. Many disputes have arisen over the settlement of percentage contracts, perhaps due in many cases to the owner's unfamiliarity with the details of the building business, and sometimes due to the abuse of the confidential nature of the agreement. Under this agreement there is no incentive to keep the cost down, nor to prosecute the work with diligence; in fact, the contractor's interests are rather in favor of slow and expensive construction.

These disadvantages have stimulated the presentation of many other methods. Some contractors will propose doing the work for a fixed profit, the owner paying all costs; others will offer to guarantee the limit of cost and charge a fixed profit; there are methods by which a proposal will be received to do the work for a fixed profit and at a limited cost, penalizing this profit for any overrun of the cost and sharing any saving made under the limit of cost. There may be contractors who will prefer doing only the labor and have all material furnished free by the owner. Sub-contractors will frequently bid on their special trade only, not wanting to assume work with which they are unfamiliar or poorly equipped to handle economically.

The Fundamental Considerations.

These methods all have advantages and disadvantages, and are worthy of consideration. There is one fact, however, that remains unchanged by any proposition, that in a well-planned building there is just so much material to be bought; there is just so much labor to be done in installing this material; there are specified details to be observed in its proper delivery and under fixed conditions it should cost just so much money.

The Material of Construction.

Industrial buildings are usually constructed of wood, brick, reinforced concrete, steel, or other material, according to the demands of service and the natural resources of the locality. Where the operations consist of transporting heavy loads during manufacture the introduction of labor-saving devices, such as cranes, trolleys, tramways, conveyors, elevators, etc., is necessary. These special requirements will largely control the type of construction; a study of these stresses will show whether the functions come within the limits of timber construction or will overrun into the more expensive reinforced concrete or into structural steel. In localities where lumber is easily obtained it is often cheaper, even if material must be sacrificed, to avoid heavy transportation charges on other material. The same advantage in

cost would hold in a steel territory by using steel instead of transporting timber or stone, cement and sand. In some cases the building site produces a desired quality of sand and stone for concrete, making reinforced concrete cheaper even than timber.

A Comparison of Cost.

This detailed arrangement of buildings into commercial quantities of material does not imply a mass of details to be supervised by the owner, nor does it tend to do away with the general contractor if his price is right. What it does do is to put a technical problem on a simple commercial basis, removing all doubt as to the best way of executing it economically. For instance, concrete is measured in cubic yards and analyzed into terms of so much sand, stone, cement, forms, labor cost of mixing, labor cost of placing it and finishing. Brickwork can be similarly assessed by classification of bricks, mortar, sand, cement, lime, labor cost of laying, scaffolds, cleaning down, etc., each subdivision being subject to close valuation according to local conditions. The control of the work is entirely in the hands of the man who is spending the money, as it should be.

How Local Conditions Were Utilized.

A specific instance was developed in making purchases for a large mill building where the following conditions developed: Quick completion was desired; the separate local trades were hungry, but their rating was hardly in proportion to the magnitude of the work. General contract bids were excessively high when compared with the local prices on separate trades, and material was very hard to get quickly. The purchases were, therefore, directed in this way: All lumber schedules were made in detail in the engineer's office before the plans were complete, and prices secured from these definite lists in open competition; material was delivered at the building. This order was placed and the time of delivery fixed. The steel and iron work was separated from other work and developed to the smallest detail on separate drawings as a flat basis of competition. Windows, doors, carpenters' irons, door sills, window sills, skylights, stairs, and all sub-trades, were similarly separated from the plans and completed on special drawings or lists, so as to read, so many like this and so many like that. Competitive prices were obtained and the orders placed. While the principal material was being prepared or in transit and other purchases being arranged, the foundation plans were completed and contracts for labor given to the lowest bidder. This permitted the completion of this part of the work by the time the plans were done and material being received.

All local contracts were for labor only at unit prices; so much per thousand or per square foot; thus relieving the local men from great financial responsibility. The specifications were written as the work developed, and were binding as to where one trade stopped and the other begun. Many sub-contracts were placed for the work erected complete. A competent superintendent was retained by the owner to work under the instructions of the engineer, and the work was completed quickly, harmoniously and in a manner satisfactory to the owner and for a very low total cost.



A Modern Factory Building (Robertson Bros., Toronto), where the Absence of Heavy Machinery Admits of a High Building.

Single Contract Sometimes Advantageous.

Other work can often be done under a single contract to good advantage. It is simply a matter of knowing exactly what is to be bought and saying so at the start.

When buildings are developed to incorporate every detail of efficiency in manufacture, every saving in maintenance cost, every practical precaution against loss of fire; when they are produced on paper and again in commercial quantities of material, there are absolute records established that prevent any tendency toward litigation. Legal disputes are generally the result of misunderstanding, uncertainty or unfair methods and the elimination of these elements breed co-operation among the varied interests and a harmonious, quick and satisfactory execution of the work involved.

Parsons & Parsons, manufacturers of rubber goods in Cleveland, Ohio, will establish a branch factory in Hamilton.

Sheet Metal Goods in Factory Construction

By J. G Lorriman, Sales-Manager, Metal Shingle and Siding Co., Limited

WHEN a manufacturer decides to build, he does not select his material without carefully considering, above all else, its economy, durability, and speed in erection. Economy is essential because in our rapidly developing country a manufacturer requires all his available capital to properly finance the expansion of his business, without tying it up in factory buildings. The advantages of durability are obvious, but it is also most desirable to have buildings erected speedily, as a manufacturer rarely undertakes to enlarge his plant until he urgently needs the additional space.

It is because they meet all these requirements that sheet metal building goods have become so popular in factory construction. But they possess many other advantages, which likewise appeal strongly to the manufacturer. A sheet metal building is fireproof to a high degree. Beyond a doubt it affords perfect protection from fire on the outside. No flying cinders can ignite a metal-clad structure. Another important fact is that metal sheeting is impervious to the wind. Consequently, a building of this kind is very easily heated—an important item in such a climate as ours.

Great advances have been made in the manufacture of sheet metal building materials during recent years. In fact, it would surprise those who have not closely followed the industry to know the many uses which are now found for sheet metal in factory construction. Of course everybody is familiar with the corrugated galvanized steel sheets, which have gained a widespread popularity. They are extensively used for both roofing and siding, and are claimed to be the cheapest material obtainable for industrial buildings. They possess great rigidity, and, when applied to a very light framework without sheathing, they give an admirable construction for warehouses, and even for the more pretentious factory buildings. Sheet steel sidings, imitating the appearance of brick and stone, are also much used, and may be seen in almost any manufacturing town in the country. They give a substantial appearance at a very moderate cost. The factory of the Napanee Canning Company, which is illustrated on this page, is covered with sheet steel siding, as are many other canning factories in different parts of Ontario.

Where a permanent roof of good appearance is desired, there is nothing better than galvanized steel shingles of some approved make, if the roof has sufficient pitch. In the case of flat roofs, all the principal manufacturers of metal building goods have on the market a standing seam metal roof, which gives general satisfaction. From a manufacturer's standpoint the principal advantages of a metal roof are its durability and fire-resisting qualities.

Various Uses.

The general public are not yet familiar with sheet metal as used in the construction of fireproof windows, skylights and cornices. Nevertheless, manufacturers are constantly using greater quantities of metal building goods in these forms. Fireproof windows with sheet metal sash are now being adopted in many factory buildings of the better class, particularly in the large cities, and skylights with frames of sheet metal are also growing in popularity. They possess distinct advantages over the old style wooden frames altogether apart from their fireproof qualities. They are lighter in weight, give a greater glass area in proportion to size, and are more thoroughly weatherproof than the wooden frames. Furthermore, it is now the general practice to use wired glass in skylights, and it would be absurd to put fireproof glass in an inflammable frame. Metal skylights are practically indestructible, and when it is considered that their cost is almost as low as that of the wooden type, their growing popularity is explained.

Metal cornices are gaining great favor in factory construction. They are probably the cheapest style of cornice available for any purpose, and are much lighter in weight than wooden cornices, and are capable of far neater and more artistic effects at a much lower cost. They closely imitate the appearance of a cut stone cornice, the crimping of the steel resembling the chisel marks, and the stamped medallions and brackets having the effect of hand-carved ornaments in stone. There is no warp to a metal cornice, as is the case with wood, and, in point of durability, it is far superior.

Even factory floors are now being made with the assistance of sheet metal. In many buildings where steel girders are employed, carved corrugated sheets are placed between the I beams, and the floor formed by filling in with concrete between the sheet and the top of the beam. This makes a very solid floor, and one which will stand the pounding of heavy machines without deflection. Perhaps a more usual practice, however, is to adopt concrete floors re-inforced with



Canning Factory in which Metal Siding is used to Advantage.

expanded metal. Some of the larger Canadian manufacturers of sheet metal building goods are now making expanded metal suitable for re-inforcing concrete floors and concrete roofs.

The large number of concrete factory buildings draws attention to one more field for sheet metal materials. Concrete must be re-inforced in some way. There are numerous systems on the market for this purpose, some using metal bars of various kinds, and some adopting sheet metal fabrics. At the present time some of the largest concrete factories and elevators are being constructed with sheet metal fabric as the bond which holds the concrete together.

The greater part of the sheet metal goods mentioned in this article have already become staples in the building trade, while, for the others, an immense development is expected. The various Canadian firms who are engaged in their manufacture are led by energetic and resourceful men, so that the future of the industry seems assured.

The New Brunswick Wire Fence Co. has increased its capital by $12,500, to enable it to handle the increasing business which is offering.

Cement in Factory Construction

By Gustave Kahn

IN the building of a modern factory the owner is confronted with more problems than was formerly the case. We have outgrown the conditions where we merely built a building of a given size and made it suit our requirements. In order to keep pace with the onward march of progress, it is absolutely necessary that our factory buildings be of the most modern type of construction; for this reason, if for no other, the prospective builder should consult with the engineers who make a specialty of this class of work. The requirements of no two factories are exactly alike, the proper lighting, proper load-carrying ability, spacing of columns to suit special machinery, heating, ventilation, and other factors too numerous to mention, play very important parts in successful factory building. The question of danger to business due to fire is often more important than the danger of fire itself, as the business loss in a greater percentage of cases is more than the fire loss.

It is gradually becoming recognized that no building material known lends itself so admirably to modern factory construction as reinforced concrete. With it one may construct buildings of any form or size. If large, clear floor areas are wanted, they may be had; if numerous columns in the interior are not objectionable, the building is so planned; however, as a general rule it is conceded that the fewer columns there are to break up the floor spaces the better. The possibility of ample lighting is greater than in any other type of permanent building construction known. Successful reinforced concrete buildings have been built where fully 80 per cent. of the entire wall area has been given over to lighting. Splendid examples of saw tooth roof construction may also be seen in finished reinforced concrete buildings. If the manufacturer requires rapid running machinery, causing an unusual amount of vibration, reinforced concrete will absorb this vibration, so that it will hardly be noticeable. If the necessary loads are exceptionally heavy, reinforced concrete will carry the heaviest possible load. A properly built reinforced concrete building can at all times be enlarged without unnecessary destruction of existing work, and is practically free from damage due to natural wear and tear, therefore maintenance charges are reduced to a minimum. The first cost of a reinforced concrete building is usually about 10 or 12 per cent. greater than an ordinary type of mill construction. The saving in insurance alone will pay a large interest on the additional investment. It is a true saying, "A burnt child dreads the fire," so a manufacturer having once experienced a fire loss dreads a second such experience, and should protect himself accordingly by building in reinforced concrete.

A number of Canadian manufacturers have already recognized the merits of this type of construction, and have made practical demonstrations thereof by building their factory in this material. Our illustrations show some of these examples as built in the Kahn system of reinforced concrete. To see these buildings is to be convinced. The Eagle Spinning Mills, originally built in 1906, havng outgrown their original plant, doubled same at the close of the year 1907. Green, Swift & Co., London, manufacturers of clothing, completed their building in the spring of 1907. It is one of the most modern examples. The Canadian Billings & Spencer, of Welland, manufacturers of drop forgings, a new enterprise for Canada, have used reinforced concrete, and their buildings for their class cannot be excelled anywhere. The building just being completed for the Andrew Darling Co., of Toronto, clothing manufacturers, is, up to the present, the most pretentious attempt of this class of construction in Canada



Factory Under Construction, with Re-inforced Concrete, Showing the Immense Possibilities for Lighting Under this System.

To sum up, reinforced concrete is a building material peculiarly well adapted to the modern factory. Under the general term "economy," it embraces almost countless advantages, including fire proof qualities, and durability, cheap, but none the less suitable construction, and it is undoubtedly ideal from a sanitary standpoint. It has entered into every feature of modern factory construction from foundation to roof, and the tendency to-day is more and more in the direction of concrete construction throughout.

Heating and Ventilating a Factory

By S. R. Sheldon, Sheldons Limited

NOTHING in the modern manufacturing plant does more to increase the productive power of the employee than a proper system of ventilation and heating, which can be depended upon to maintain an even temperature and keep the air fresh and healthful.

More attention is given to these matters now than a few years ago, and naturally the problem becomes more difficult in most instances owing to overcrowding and the increase in the vitiation of the air due to the process of manufacture.

Combination of Heating and Ventilating.

A factory can be advantageously heated by direct radiation, but if a system of ventilation is desired, a fan is used, and in most instances the ventilating system can be combined with the heating system in such a manner as to render the ventilation positive under all conditions, and the heating variable according to outside temperature.

In the accompanying illustration is shown a typical installation of this combined heating and ventilating system. In the fan room is situated the heater coils, fan and engine, and in the adjoining building is the boiler, which furnishes the heater and engine with steam. The fan is operated by a special low pressure direct connected engine, the exhaust steam from which is used in the heater coils.

Built in Sections.

The heater is usually built in six or seven sections, one or more of which are operated by the exhaust steam from the fan engine. The balance of the heater is furnished with steam direct from the boiler, or it can be arranged to utilize the exhaust steam from the main factory engine. Each section of the heater is usually fitted with valves, so that one or more sections can be cut out of service in mild weather.

The fan is arranged to draw the air through the coils, where it is heated to a comparatively high temperature, and discharge it into a system of underground ducts which conduct the hot air into the several departments. In each department overhead galvanized iron ducts are connected to the underground ducts. These overhead iron ducts conduct the heated air to the several parts of the building, and ensure an even distribution of the heat throughout the entire building. The speed of the engine can be varied to give a more or less rapid air change in the building. The heat can be shut off from any department by means of gates or dampers placed in the main ducts, and at all outlets. The water of condensation is usually returned from the heater to the boiler either by means of an automatic pump and receiver, steam trap or other suitable device.

Offices Should be Heated Independently.

In the accompanying illustration the offices are shown fitted with direct radiation entirely independent of the factory heating system. This is advisable, in that the offices are frequently in use in the evenings and at other times when the factory heating system is idle.

The boiler used for these heating systems is usually of the return tubular type in a brick setting. In most instances where the boiler is utilized for heating alone, it is operated at a pressure of 20 pounds per square inch, the exhaust steam from the fan engine being discharged into the coils at a back pressure not exceeding 2 pounds, the main steam supply from the boiler to the heater being fitted with a pressure reducing valve set to reduce the pressure from 20 pounds to 2 pounds pressure, thus making the low pressure steam supply to the coils entirely automatic.

A Vacuum Pump Should be Used.

In a factory which is operated by steam, the exhaust steam from the main engine is usually ample to heat the entire plant, and when this exhaust steam is used it is advisable to install a vacuum pump to return the water of condensation from the heater coils to the feed water heater in the boiler room. The use of a vacuum pump in this connection eliminates a great deal of the back pressure on the exhaust steam, ensures a perfect drainage of the entire piping system, and gives an unimpeded circulation of steam, also effectively prevents air binding and water hammer in the coils, while it also permits of the return of the water of condensation from points considerably below the line of drainage mains.

In the galvanized iron ducts, and in the underground ducts allowance is made for all turns and branches for the resistance these offer to the air. The entire air supply can be taken outside the building, or part or all of the air may be returned from the building to the fan to be re-heated. In ordinary factory heating and ventilating a complete change of air every fifteen or twenty minutes would be ample, but for factories where obnoxious gases or odors are given out, a more rapid air change is calculated on, and auxiliary ventilating fans are so placed and operated as to remove the odors, vapors, etc., as soon as made.

Cleansing the Air.

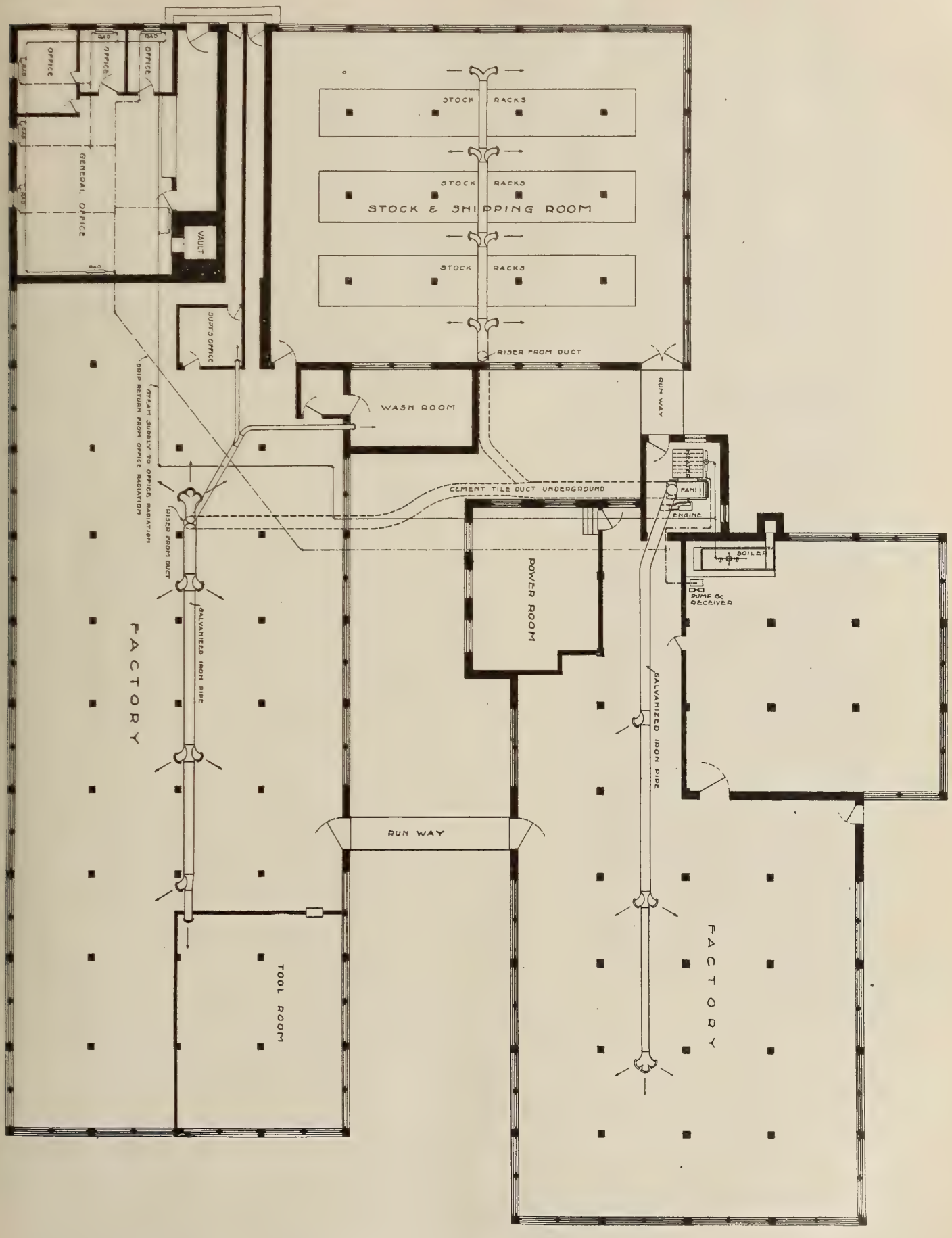
In buildings where absolute cleanliness is very essential, such as laundries, shirt factories, etc., an air washer should be installed to purify and cleanse all air admitted to the building. By using an air washer all air admitted into the building, or in fact all air handled by the fan, is first passed through a tempering coil, then it is passed through a series of water sprays, which separate or wash out all floating particles of soot, dust, etc., from the air. The air after being washed is passed through a series of baffle plates or eliminators, on which are deposited any particles of water that may have a tendency to travel with the air into the fan.

Ensures Healthy Condition.

By the use of this device the purification of the air to a great extent goes beyond the mere extraction of dirt and dust, many other impurities being eliminated; a healthy degree of humidity is also maintained irrespective of outside hygrometric changes. One charge of water is used over and over again for any desired length of time, circulation being maintained by means of a centrifugal pump which can be operated by belt from the fan shaft. By maintaining a proper degree of humidity in a building a lower temperature will be found satisfactory, as it is a well known fact that a moderate temperature with the humidity maintained at about 75 per cent. of saturation is more healthful and satisfying than higher temperature at a less degree of humidity.

Modifications for Different Factories.

Numerous adaptations occur where the convenience of the massed heating surface or the effects of perfect ventilation have a considerable commercial value. Of course the individual conditions must control the method of application and installation, and for this reason each plant has to be carefully considered, and the heating and ventilating should be designed by a competent engineer or by a manufacturer of these articles.

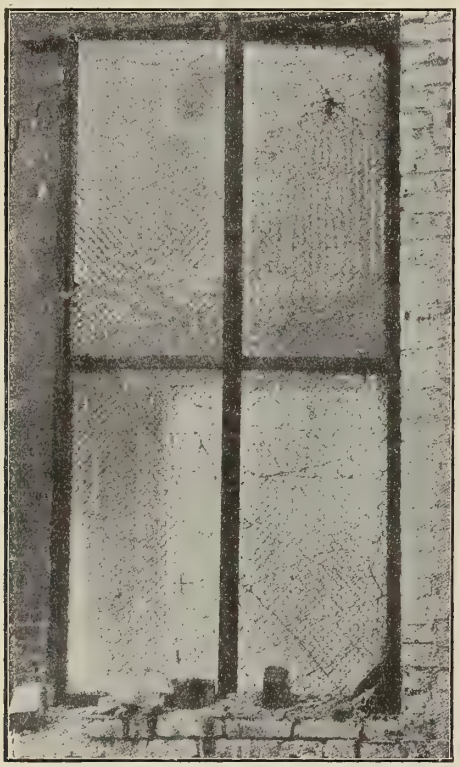


Factory Plan made for "Industrial Canada" by S. R. Sheldon, to Illustrate a Correct System of Heating and Ventilating.

Fireproof Windows, Doors and Skylights

By J. A. Findlay, Treasurer A B. Ormsby, Limited

TO actually reduce our annual bonfire we have got to protect the vertical openings,—that is the window, door, stairway and elevator openings,—for of all the useless wastes that we, as people, have indulged in, that of fire is the most inexcusable. By it not only is the property devastated, but thousands of lives are yearly sacrificed. In 1904 in Canada and the United States seven thousand people were burned, an average of nineteen fatalities through fire every day in the year, and a record that nearly equalled that of all the railroad accidents in both the countries—generally considered the most fruitful source by far of fatal accidents; and the record of 1904 was not an extraordinary one. If the loss of lives is appalling, the loss of property is disgusting. Our fire losses are equal to a tax of twenty-five dollars per



Fireproof Window After Going Through a Hot Fire. Glass Cracked But None Fallen Out.

year per family, and that tax shows but the loss of property consumed.. Canada and the United States have burned up one hundred million dollars' worth in three years, and fire loss is final and absolute.

Fire either originates inside a building or the building is ignited from an outside blaze. Statistics in recent years show that seventy-three per cent. of all fires start or spread via the window route alone, and forty-eight per cent. of all fires are caused from buildings becoming ignited from fires in adjoining buildings. That is, we can almost say that a fire starting in one building is most frequently the cause of another fire, and the other fire could not start if the openings were protected. If a live ember of a burning brand falls on an ordinary wooden window the wood is almost sure to take fire; so, too, intense heat radiated by fire in a burning building will ignite an ordinary wooden frame. These facts are strong recommendations for metallic frames. Any fire starting in an adjoining building is of no concern to you if you have metal windows with wired fireproof glass in the sash, for no matter how hot the fire is, it will do them no harm if the windows are made automatic heat closing,—that is, made with one of the sashes to pivot, and held open by a chain on which is a fusible link. This fusible link is made of brass and solder. Under heat the solder melts, breaking the link, and the open sash closes of itself. Windows may be left open with the assurance that they will close of themselves without human agency. The necessity of thoroughness in this work has been amply proven in different fires on different occasions, where the properly made goods have stood very severe tests. This was shown in Baltimore, more recently in San Francisco, and also in some of our Canadian cities and towns. The foolishness of installing anything but standard goods was forcibly demonstrated by a recent fire in the Empire Plow Works, Cleveland, Ohio, where the windows utterly failed. A casual examination of the frames and sash of these windows that failed, tell the whole story; they were made of wood, covered with tin, and were tinsmith's work, having none of the necessary details required by the underwriters' specifications. There were no interlocking joints. The tin was simply nailed to the wood; apparently the wired glass was held in place by 1-inch brads and the ordinary application of putty.

Windows to meet the requirements for fire protection should be as follows: The frames and sash should be made of twenty-four gauge iron, that will not flake or break in bending. The joints should be made with interlocking seams and rivetted, and where possible the joints should be formed so that the edge will be towards the heat exposure. The joints do not depend on solder, as under fire this would melt and the window would fall to pieces. The head and sill of frame, where practical, is made of one piece, securely rivetted or fastened to the jamb by a double seaming, which affords suitable fire-resisting and weatherproof qualities. The head is closed at the top. The sills are filled with concrete, which makes it thoroughly substantial.

The sashes are glazed with ¼-inch wired glass, rough rolled, cast or polished. This glass has a wire mesh midway between the two surfaces of the glass. The size of the glass used is governed by the severity of the exposure. In no case does it exceed 48 inches either way. The glass is retained in the sash under all conditions, and does not depend on putty to hold it in its place. It is set in rabbets ¾-inch deep, and the glass has a bearing of ⅝-inch at all points.

A number of defects are to be guarded against in installing fireproof windows. Some of them are as follows:—

In the frame a wrong gauge iron is used, as it can be worked up much quicker and is a great cheapener. Instead of the joints being interlocked they depend entirely on solder, which, under fire, allows the frame and sash to fall apart. Instead of the sill being filled with concrete, a piece of wood, which will burn and fall out when struck by fire or will rot in course of time, is substituted. Some glass in the frames is only ⅜-inch thick and is larger than 48 inches either way, as there can be a saving made because the glass will cut to better advantage in larger sizes. Sometimes the glass depends upon putty alone, or sometimes the rabbet is shallow, and the glass in either case will not remain in its place when struck by fire or when a fire stream is put on it.

The most severe test, to the writer's knowledge, that fireproof windows have been subjected to in actual fire, was in the building of the California Electric Works at San Francisco at the time of the conflagration. It was a "mill con-

struction" building, built in the usual manner of this construction. The windows had concrete-filled metal sash and frames. The lower sashes were pivoted and held open by a fusible link attachment; the upper sashes were stationary, the sashes throughout being glazed, of course, with wired glass. The severest test of the glass was on the west side, where a three-storey warehouse was totally destroyed 27 feet from the west wall of this building. In the intervening space stood three car loads of insulated wire. The insulation of this burned fiercely, and the wind drove the flames against the many-windowed west wall of this building. Several windows were open when the adjoining building began to burn, but the fusible links closed them promptly. The heat against these windows became so great that the wood work four feet inside the glass was charred but did not ignite. The fact that this all occurred after the earthquake gives evidence that the efficiency of wired glass was not affected by the quake. The wired glass is at the present time considerably cracked, but in no case was there the smallest hole, and they do not consider it necessary to reglaze the windows.

Fireproof Doors.

It depends principally on the size of the unprotected areas as to what damage a fire starting in the interior of a building will do. The next greatest danger is that the fire may travel from one floor to another, either through the stairway openings or elevator shafts. We will deal first with these areas. The smaller the areas in any building the less likelihood of a bad fire, as when fire is confined to a small area it is easily handled, does little damage and is soon extinguished. If partition walls be well and strongly built, fire does not damage them, and if the openings be protected with tin-clad fireproof doors, then no fire can get out of the area in which it starts. The doors are automatic heat-closing. The great majority are sliding doors. They have in most cases an incline track (but not necessarily so, as either doors with straight or incline tracks are automatic heat-closing). The fusible link comes out an inch beyond the edge of the door, so that no matter in what position the door is the link is always right in the opening; that is, if the door is wide open the link is still in the opening; so no matter in what position the door is left it is sure to close of itself when struck by fire. When struck by fire the link fuses, releasing the rope on which the weights are held. The weights drop and the door closes of itself. The fire is then fought with comparative ease.

Tin-clad doors are made of well-seasoned matched pine, dressed, tongued and grooved, the boards being not over 6 inches in width. The doors are made of three thicknesses of ⅞-inch boards, the outside layers being vertical and the inside layers being horizontal. They are encased in tin, which is applied so that during its exposure to the fire it will present the greatest possible resistance to bulging or bending up at the seams. When covered in this way there are no nail-heads whatever to be seen, as each one has two layers of tin over it, and under fire there is no danger of the heat drawing the nails out, which was the case in the old-fashioned doors. The track is bolted through the wall, so that the doors are up as solid as the wall itself, and to ensure that no fire will burn away the portion of flooring under the door, the flooring should be of concrete or of steel (or wrought iron, not less than ¼-inch in thickness). This has to be built into the wall at least 6 inches at each end and to extend over and flush with the outer surface of the door. The door should fit snug, that is, there should be no space between it and the floor which would allow fire to travel underneath the door, nor should it be out too far from the wall, which would allow space and allow fire or smoke to get through. Some manufacturers use adjustable hangers, which allow the doors to be adjusted any way at any time after being hung by simply turning a screw. As it is very essential that a fireproof door should at all times work freely and smoothly, this is a big advantage, as the person in whose building the doors are, can readily adjust them himself at any time with very little trouble. Where a hinged door is used, through an ingenious device which would take too much space to describe, this door is also made automatic heat-closing.

Rolling Steel Doors for Elevator Shafts, Stairway Openings, Etc.

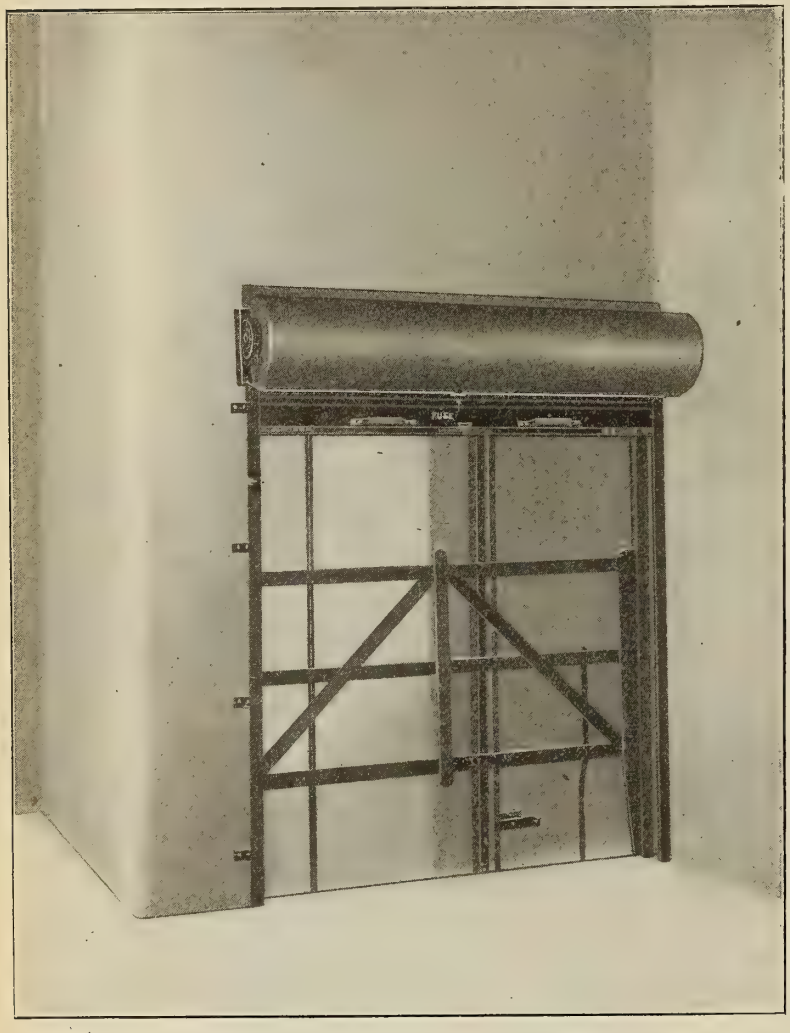
In an elevator shaft or a stairway, and sometimes in a partition opening through lack of space, a tin-clad or kalameined-clad sliding or hinged door cannot be used. Something is wanted that takes up but little space outside the actual opening, something that is fireproof, that can be easily operated, that is endorsed by the underwriters and that reduces the insurance rates. Such a condition calls for a rolling steel door, which answers all the requirements. It requires but one foot of space above the opening and 1½ inches on either side of opening.



Kalameined Clad Fireproof Door with Wired Fireproof Glass Installed in Passenger Elevator Opening.

A rolling steel door or shutter to the underwriters' requirements is an open-hearth, cold-rolled sheet steel, corrugated and rivetted together and forming an unbroken sur-

face. It is very strong, stands any amount of wear and rough usage, and along the edges of the shutter is a heavy metal shield to protect it from wearing out by the friction in the iron grooves. The deep corrugation gives the door an unusual strength and rigidity, and a few dents or buckles will not interfere with its operation. It is automatic heat-closing, and no matter in what position it is left it will drop automatically when struck by fire, being fitted with a fusible link, and will stop the fire from spreading. Once closed it remains in place without gaping or twisting, and proves an efficient fire-stop. The fusible link attachment does not in any way interfere with the working of the door. The door is raised by hand except where an opening of 10 x 18 feet or



Rolling Steel Door Protecting Opening in Elevator Shaft, Showing Door Up

larger, where a chain gear is used, which a boy can easily raise in twenty seconds.

There are doors made with interlocking slats, but a door whose integral parts are not air-tight is certainly not fireproof. The National Fire Protection Association, composed of insurance boards, the National Board of Fire Underwriters and its affiliated bodies, in their annual rules, issued May 25th, 1905, under rules "For the Construction of Steel Rolling Doors and Shutters," on page 299, Class H, Rule 47 (with this note added), say :—

Rule 47.—Curtain or Shutter.

To be of galvanized steel not less than 24 U. S. gauge, and to be preferably of corrugated sheets securely rivetted together.

Note.—Curtains made up of interlocking slats or strips permit the passage of smoke and gases through the joints; under severe pressure the gases passing through may be ignited on the inside. It is almost more difficult to protect curtains of this character against rust and injury.

A practical test of a one piece continuous rolling steel door happened in Toronto at Geo. H. Hees, Son & Co., Ltd. fire at 52 Bay Street a few weeks ago. The freight elevator openings were equipped with rolling steel doors. When the fire began the link on the door fused and it dropped, and although the fire was very severe it withstood the flames, did not gape or bulge, and remained right in place, keeping the flames from getting down the elevator shaft and reaching the other floors. The rolling steel doors that we speak of also underwent a test at the Underwriters' Laboratory at Chicago in 1904 in a chamber constructed for such tests. There were two shutters in the properly constructed chamber, one on either side of a 14 in. brick wall. The shutters were of the regular corrugated type with the grooves fastened to the wall by means of 3-8 in. bolts. At the end of fourteen minutes after this test was started the temperature on the fire side of the shutters was 1,170 degrees. The temperature of the chamber on outside of the shutter was 92 degrees. Bulging or buckling did not reach more than one inch at any time. At the end of forty-five minutes the temperature on the fire side was 1,272 degrees, with that of the chamber on outside 119 degrees. At the end of an hour the temperature on the fire side was 1,290 degrees, with no apparent change in the condition of the shutters. There was a bulging of less than 1-2 in. in the centre. The flames were then turned off and a 7-8 in. stream of water applied to the curtain for about one minute. After the shutters were cooled it was found that they were securely in position and in close contact with the wall; no openings were formed through or around either of these shutters.

These doors do not necessarily have to be installed in a brick wall, but may be installed in a fireproof partition which is composed of studding and expanded metal lath, on which is placed 2 in. of cement concrete. This fireproof partition is endorsed and recommended by the fire insurance experts.

Skylights.

On a building that is not as high as the surrounding ones a fireproof skylight is essential. A fireproof skylight is one that has no wood in its construction, that is glazed with wired glass and that possesses great strength. These points are essential, for if wood were used it would burn and the glass would fall out of the light, allowing an opening for fire. If ordinary glass is used heat would break the glass, with the same result as aforementioned, and strength is needed to withstand debris, as during a fire a skylight sometimes has to stand a very severe strain on account of falling bricks, planks, etc. It is a very difficult matter to break wired glass. You can crack it, but it is practically unbreakable. A skylight, besides being fireproof, should be also wind, dust and waterproof; then it is a fuel saver in winter, and keeps that portion of the building under the skylight dry, clean and warm.

In the Baltimore fire The Safe Deposit and Trust Company's building stood in the heart of the burning district, and had as its principal feature of construction a wired glass skylight 30 x 40. ft. in size and covering the centre of the large banking room. Although this skylight bore the brunt of the tremendous heat from without as well as the shock due to a section of falling wall from the adjoining five story building of the Baltimore *Sun* it remained in place absolutely. The interior of the building was quite unharmed, and the company was ready for business next morning.

The Locomotive and Machine Company, Ltd, Montreal, have on their locomotive shops over 40,000 feet of wired glass skylight surface. The Canadian Kodak Company on their works in Toronto have over 4,000 feet also.

Among the Industries

Mr. George C. Roe has resigned from the managership of the Ottawa Steel Castings Co., Ltd.

Lockerby & McComb, manufacturers of tarred felt paper and roofers' supplies, suffered a $50,000 loss by fire recently.

The Ontario Sugar Co. of Berlin have decided to add the refining of raw sugar to their present business of manufacturing beet sugar.

The name of the Dominion Dump Car Company, Limited, Montreal, has been changed to that of the Hart-Otis Car Company, Limited.

A large new plant is being projected for the Louden Machinery Co., Guelph. The present factory has proved inadequate to their needs.

The Sackville Paper Box Co., of Sackville, N.B., which was recently organized, have purchased a factory building, and will instal a complete plant of machinery at once.

A large meat packing factory will be built in Tillsonburg during the coming summer. Mr. A. Crawford, who is interested in the same line of business in Scotland, will establish the plant.

A company is being organized in Owen Sound to build a dry-dock there. Vessel owners have been urging for some time the establishment of a dry-dock at that port, and Mr. W. P. Telford is now getting a company together to carry on the work.

The Maple Leaf Flour Mills at Kenora were destroyed by fire during the past month. These mills were only opened about a month before, and were an important industry for Kenora. They had a capacity of 4,500 barrels a day. The loss was half a million dollars.

The new smelting plant of the Montreal Reduction Co. at Trout Mills, Ont., was put in operation for the benefit of the Minister of Mines and a delegation from North Bay recently. The company is handicapped by the present financial stringency, and have asked the Ontario Government to extend monetary assistance to them.

It is probable that the government of Nova Scotia will appoint an inspector of boilers for Cape Breton. His duties will cover the works of the Dominion Coal Company, Dominion Iron and Steel Company, Nova Scotia Steel and Coal Company, and the Inverness and Port Hood Mines, and he will keep constantly in touch with the conditions at the steam plants of these companies.

The modern plant of the Canadian Billings & Spencer, Limited, of Welland, Ont., which has been in course of erection since May, 1907, is now in full running order. This is practically the first drop forging plant in Canada, and it is welcomed by all users of drop forgings, which are used for intricate parts of machinery where strength and durability are very essential. They will also manufacture machine wrenches, lathe dogs, machinists' tools, locomotive forgings, railroad supplies, etc. This firm located in Welland, where they could procure cheap electric power and natural gas, the latter being used entirely for fuel. With these natural advantages, they are in a position to compete with any drop forging plant on the continent.

Trade Enquiries

NOTE.—For further information regarding any inquiry mentioned under this heading or the names of inquiries, apply by numbers to the Secretary, at Toronto.

340 **Acetate of Lead.**—A **Manchester** firm asks for samples and c.i.f. prices of grey, brown and white acetate of lead from Canadian exporters.

341 **Agent.**—Well-known **Delhi, India,** firm of commission agents is anxious to hear from Canadian exporters who could do business in India. They claim there is a good field for a profitable trade in that country, and offer their services to anyone interested on a commission basis. Are prepared to do extensive advertising and have a splendid connection.

342 **Agent.**—A commission agent and general import and export merchant in the north of **England** desires to get into touch with Canadian manufacturers requiring such services as he can render.

343 **Agencies.**—A **Bristol** firm would be glad of Canadian agencies, particularly in grocery trade.

344 **Agent.**—A **Chester** correspondent is prepared to act as agent for Canadian manufacturers. Small goods preferred, such as safes or implements.

345 **Agents.**—An **Indian** firm of importers of foreign goods desires to get into touch with Canadian firms wishing to export to that country. They would be willing to act as commission agents for Canadian exporters.

346 **Apple Waste.**—A **London** firm wishes to get into touch with Canadian shippers who can quote for several thousand barrels of apple waste (cores, skins, etc.).

347 **Auger.**—A **South African** firm of wholesale and retail hardware merchants desires to communicate with Canadian manufacturers of auger bits and augers of all kinds, and engineers' tools.

348 **Bedsteads.**—A **Manchester** firm asks for c.i.f. prices of strawboard from Canadian exporters.

349 **Blood Albumen.**—A **Manchester** firm asks for prices of blood albumen from Canadian exporters.

350 **Broom Handles.**—A **Manchester** firm asks for prices of basswood broom handles, sized 50 inches, 72 inches, 84 inches and 108 inches x 1 1-8 inches, and 50 inches x 1 1-4 inches, from Canadian manufacturers.

351 **Barytes.**—A **Manchester** firm asks for samples and prices of grey and white barytes from Canadian exporters.

352 **Blowing and Exhaust Fans.**—**Wellington, New Zealand,** firm of machinery dealers is anxious to get in communication with Canadian makers of blowing and exhaust fans who can do an export business. Reference.

353 **Butter Boxes.**—**St. John, N.B.,** firm are in the market to purchase quantities of butter boxes.

354 **Butter Casks.**—A commission agent in **Denmark** desires to hear from Canadian importers of staves and bottoms for butter casks made from beech in Denmark.

355 **Canned Apples.**—A **Manchester** firm asks for prices of canned apples c.i.f. from Canadian exporters.

356 **Canned Meats.**—A **Manchester** firm wishes to obtain prices of canned meats from Canadian exporters.

357 **Canned Goods.**—Inquiry has been received from a correspondent at **Nottingham** for the names of high class exporters in Canada of canned goods and provisions.

358 **Casein.**—A **Manchester** firm desires to correspond with Canadian exporters.

359 **Corn Starch.**—A **Manchester** firm asks for prices of corn starch in 2 cwt. bags (224 lbs.), c.i.f. from Canadian manufacturers.

360 **Carriages.**—An importing firm in the city of **La Barca, Jal., Mexico,** wishes to get into communication with Canadian exporters of carriages, carts and wagons.

361 **Carriages.**—A **South African** firm of cartage contractors and horse dealers desires to correspond with Canadian manufacturers of carriages. Manufacturers are requested when communicating to state the cost of shipment from their factories to Montreal and St. John, N.B.

362 **Carriages and Trade Vehicles.**—Firm of general carriage dealers and cartage agents in **Transvaal, South Africa,** is in the market to purchase small lots of the above vehicles from Canadian exporters. Good reference, shipment direct by Canada South Africa line.

363 **Conveying Machinery, Hoisting and Gasoline Engines.**—A firm of engineers and contractors in **Prince Rupert, B.C.,** desires to get in touch with Canadian makers of this class of machinery. Business in sight.

364 **Cold, Rolled and Drawn Steel.**—**Canadian** firm is in the market to purchase small quantities of bright, cold rolled and drawn steel. Member of C.M.A.

365 **Exporters' Agents.**—Well-known **New York** firm of exporters' agents has an attractive proposition to place before Canadian firms who can do Australian trade. Further particulars can be obtained at this office. The firm in question has a splendid connection, and is of high class.

366 **Fish Oils.**—A **London** firm desires the addresses of Canadian producers and shippers of fish oils.

367 **Fruit Pulp.**—A **London** firm wishes for the addresses of Canadian producers of fruit pulp, in a position to do export trade.

368 **5, 10 and 15c. Articles.**—A party about to open a 5, 10 and 15c. store in **Saskatchewan** is in the market to purchase suitable goods for his store.

369 **Furniture, Paper Hangings.**—A **London** firm would like to come into contact with some Canadian manufacturers of furniture, particularly chairs, and also of paper hangings, with a view of taking up their agencies for the United Kingdom, and also for Germany.

370 **Furniture.**—An importing firm in the city of **La Barca, Jalisco, Mexico,** wishes to get into communication with Canadian exporters of furniture.

371 **Glucose.**—A **Manchester** firm asks for prices of glucose from Canadian exporters.

372 **Handles.**—A large manufacturing firm in the **North of England,** making shovels, picks and hammers, will be pleased to consider prices from Canadian firms in a position to supply the necessary handles for these tools; samples will, if necessary, be forwarded.

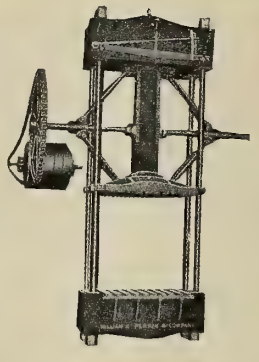
373 **Handles.**—A **Bristol** firm desires to import car lots of best basswood broom handles in the following dimensions: 50 inches x 1 1-8 inches and 50 inches x 1 1-4 inches.

374 **Handles for Picks, Shovels and Spades.**—An important **English** firm, who are considering importing large quantities of handles direct for the making of picks and shovels and spades, inquire for the names of Canadian manufacturers. If necessary, samples will be forwarded.

375 **Leather, Hemlock Sides, Bends, etc.**—A **Leeds** firm wishes to hear from leather firms in Canada exporting hemlock sides, bends, and shoulders, with prices.

376 **Lumbermen's Supplies, Mackinaw Goods, Heavy Underwear, Mitts.**—A lumber contractor in **Saskatchewan** is open to purchase the above articles from Canadian manufacturers not now represented in the West.

Hydraulic Presses
Power Screw Presses
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AND
Company, Limited,
TORONTO, Canada.

CURLED HAIR GLUE SANDPAPER
THE DELANY & PETTIT Co. LIMITED.
TORONTO.

377 **Linseed Oil.**—A **Manchester** firm asks for prices of linseed oil from Canadian manufacturrs.

378 **Manufacturers' Agent.**—Old established importing house, **Manchester, England,** will be pleased to hear from manufacturers of all kinds of handles, dowels, and every description of wooden ware, hardware, etc., who desire to be represented in Great Britain. Will buy outright, or act as agents on a commission basis.

379 **Manufacturers' Agent.**—A well-known firm of manufacturers' agents in **Montreal, Canada,** would be glad to hear from Ontario houses desiring first-class representation in Eastern Canada. References.

380 **Manufacturers' Agent.**—Well-known firm of manufacturers' agents in **London** is open to act as agents for first-class Canadian firms in any lines. This is a high-class firm with good references.

381 **Maple Last Blocks.—Leicester, England,** firms of wholesale boot and shoe appliance dealers are open to purchase supplies of maple last blocks in car load quantities from Canadian exporters. Quantities desired in sizes of 1 to 9 at prices varying from $33.00 per thousand to $51.00 per thousand. Shipment f.o.b. United States ports; payment cash against documents. Must be kiln dried. This is a good trade opportunity.

382 **Marble Slabs for Counter Show Cases.—Canadian** firm, member of C.M.A., is in the market for the above material.

383 **Mica.**—A **Manchester** firm asks for samples and prices of mica from Canadian exporters.

384 **Mica Splittings.**—A **Manchester** firm asks for prices of mica splittings from Canadian exporters.

385 **Mica.**—A **Lancashire** firm importing large supplies of mica, desires to get into touch with producers and exporters in Canada.

386 **Molybdenite.**—A **Manchester** firm asks for prices of molybdenite from Canadian exporters.

387 **News Paper, Condensed Milk.**—Inquiry has been made for the names of Canadian manufacturers of paper for use in the newspaper trade, condensed milk, and other commodities, by a **London** firm acting on behalf of buyers in **South Africa.**

388 **Nickel and Other Ores.**—Mines product dealer in **Hamburg, Germany,** is in the market to purchase 5,000 ton lots of nickel and other ores.

389 **Pick Handles.**—An important **Sheffield** firm makes inquiry respecting the prospects of securing supplies of from 50 to 60 tons of pick handles, must be of the very best quality and finish, and exporters must guarantee that shipments will be promptly, regularly, and continuously delivered. A large and profitable trade can be established in this direction, and sample of the required handle will be sent to Canadian manufacturers open to take a keen interest in the enterprise.

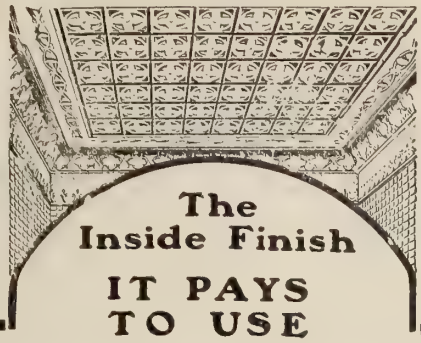
390 **Pine Squares.**—A **Manchester** firm asks for prices of pine squares of sizes, 4 inches x 4 inches, 5 inches x 5 inches, 6 inches x 6 inches, 7 inches x 7 inches, from Canadian manufacturers.

391 **Planks.**—A **Manchester** firm asks for prices of beech and maple planks from Canadian exporters.

392 **Pulleys.**—A **Manchester** firm asks for catalogues and prices of wood split pulleys from Canadian manufacturers.

393 **Pulleys.**—A **Manchester** firm, at present buying in the United States, asks for catalogues and prices of wrought iron pulleys from Canadian manufacturers.

394 **Representative.**—A commission agent in the **South of England** desires to get into communication with Canadian milling firms wishing to be represented in Great Britain.



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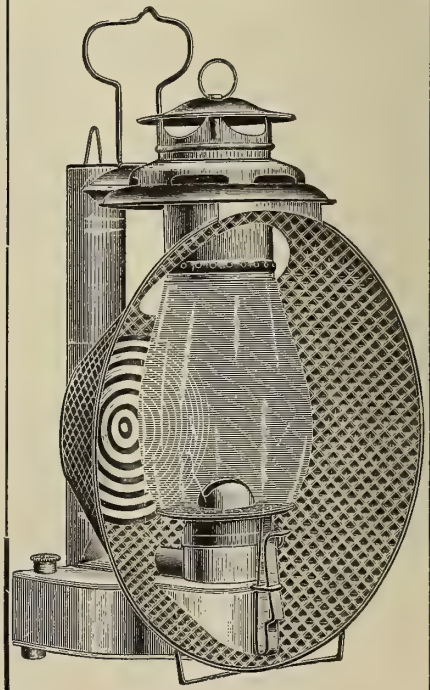
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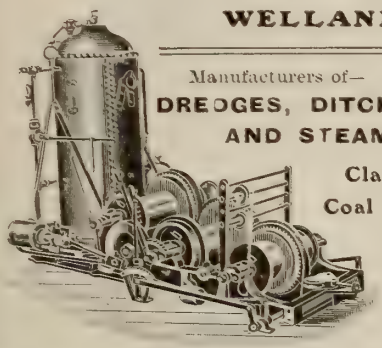


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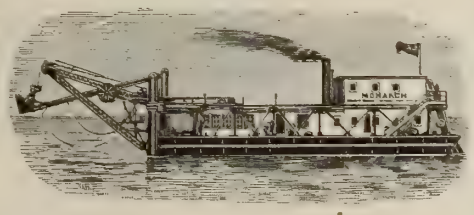
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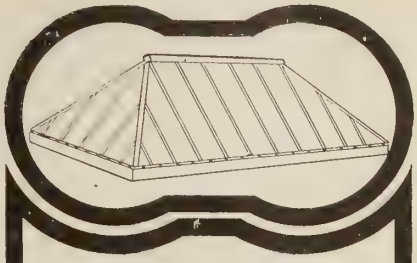


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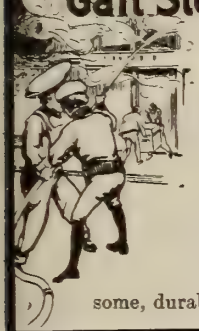
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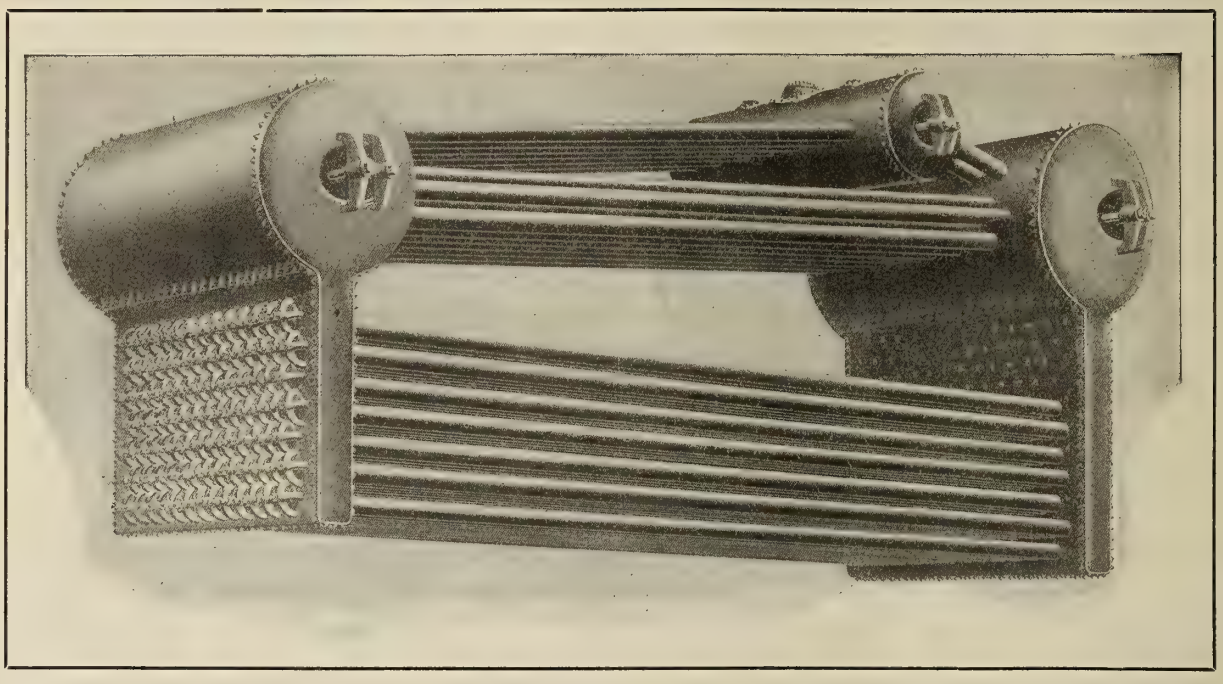
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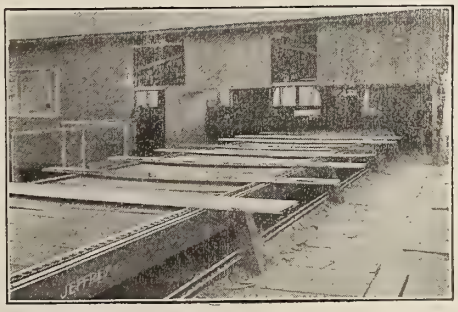


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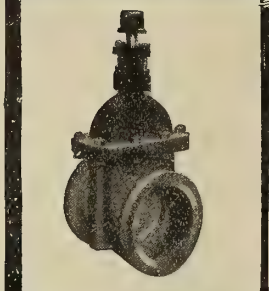
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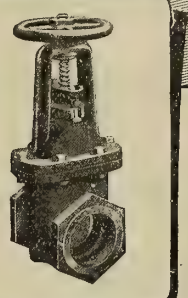
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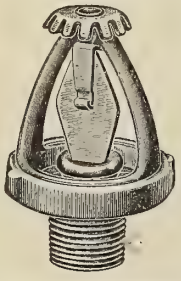
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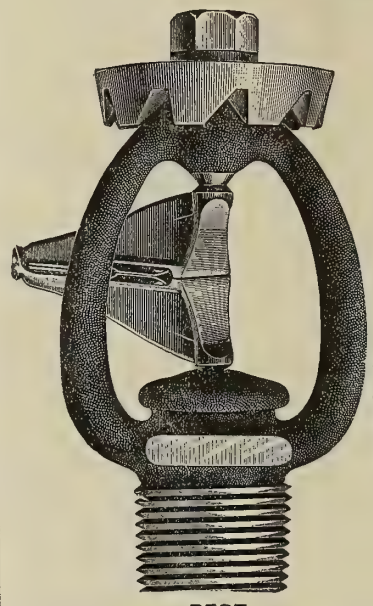
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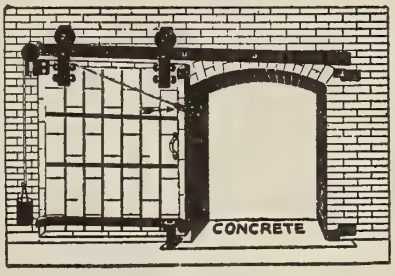
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Largest manufacturers in Canada. Bar Iron, Steel, Wrought Pipe, Cut and Wire Nails, Staples, Pressed and Railway Spikes, Wire, Horse Shoes, Horse Nails, Lead Pipe, White Lead, Shot, Putty, Tacks, Bolts, Nuts, Rivets, Washers.

JEWELLERY

JOHN WANLESS & CO.,
Established 1840. **TORONTO.**
Manufacturers of Rings, Brooches, Watch Chains, Medals, Class Pins, Lockets, Cuff Links, and Fine Diamond and Pearl Jewellery.

LABELS

THE SOUTHAM PRINTING & LITHOGRAPHING CO., Limited
LONDON, CANADA
Label Manufacturers—Varnished, Embossed or plain Labels for all purposes.

LEATHER

CLARKE & CLARKE, Limited,
(Established 1852.) **TORONTO, CANADA.**
Leather Manufacturers—Colored Sheepskins, Glazed Sheep Kid, Napa Button Fly, Bookbinders' and Fancy Leather, Skivers, Fleshes, Russets, Velvet Art Leather, and Spanish Furniture Roans.
Montreal—59 St. Peter St. Quebec—518 St. Valier St. Cable Address—"Clarkes, Toronto."

A. R. CLARKE & CO., Limited,
(Estab. 1852.) **TORONTO, CAN.**
Manufacturers of Patent Colt and Glazed Kid, Gloves, Mitts, Moccasins and Leather Coats.
Works—613-617 Eastern Ave.
Montreal Agency—59 St. Peter St.
Quebec Agency—492 St. Valier St.
Cable address, "Arc," Toronto.

RICHARD & CO.
Mill at Petit Pre, Ange-Gardien, P.Q.
Factory and Office, 159-161 Arago St., Quebec
Manufacturers of Leather Board, Friction and Fibre Board, and Leather Board Counters; also all grades of Rubber Cement for the Boot and Shoe Manufacturers.
Prices on Application

LITHOGRAPHERS

THE DAVID SMITH ENG. & LITHO. CO.,
(Formerly of Rolph, Smith & Co.),
56-58-60 CHURCH STREET.
Adjoining Toronto Railway Chambers.
Engravers and Lithographers. Bank and Commercial Stationers, Manufacturers of High Class Calendars and Advertising Novelties.

ROLPH & CLARK, Limited
Formerly
Rolph, Smith & Co. Clark Lithographic Co.
Artistic Lithographers, Engravers and Printers
Cor. Simcoe and Pearl Sts., Toronto

The TORONTO LITHOGRAPHING CO, Limited
King Street West, Toronto, Can.
Lithographers and Engravers by all processes. Manufacturers of High-class Advertising Novelties. Map Engravers and Fine Art Printers, etc., etc.

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THE FORSYTH GRANITE AND MARBLE CO.,
MONTREAL.
Marble of all kinds for interior decoration and sanitary purposes. Mosaic and tiles. Granite work and granolithic sidewalks.

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THE CANADA METAL CO.,
TORONTO.
Babbitt, Solder, Lead Pipe, Traps, Electrical Zincs, and carry in stock Pig Lead, Tin, Antimony, Copper, Bismuth, Phosphor Tin, Aluminum,

MINING MACHINERY

THE JEFFREY MFG. CO.
Canadian Branch } **MONTREAL**
Makers of Link Belting, Steel Chains, Elevators, Conveyers, for handling Material of all kinds
CATALOGUES FREE

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MONTREAL.
Linseed, Cotton Seed, Olive and Castor Oils; Neatsfoot, Sperm, Seal, Whale and Cod Oils; also Mineral Oils and Greases of all sorts.

OILCLOTHS AND LINOLEUMS

THE DOMINION OIL CLOTH CO., Ltd.,
MONTREAL.
Manufacturers of Plain and Printed Linoleums and Oil Cloths of every description. Floor Oil Cloths, Table Oil Cloth, Carriage Oil Cloth, Enamelled Oil Cloth, Stair Oil Cloth, etc.
Decorative Burlaps, double sized and oil coated.

ORGANS

THE BELL PIANO & ORGAN CO., Ltd.,
GUELPH, ONT.
Manufacturers of High-Grade Upright and Grand Pianos, Reeds Organs, and Automatic Piano and Organ Players.
Branches at 49 Holburn Viaduct. London, E.C.: 15 Bridge St., Sydney, N.S.W.

W. DOHERTY & CO.,
CLINTON, Canada, and LIVERPOOL.
ESTABLISHED 1875.
Manufacturers of
High-Grade PIANOS and ORGANS.

GODERICH ORGAN CO.,
GODERICH, ONT.
Manufacturers of High-Grade, Fine Tone Reed Organs, Piano Stools, Music Cabinets, Office Desks, Closet Seats. For export and home trade.
Agencies — Liverpool, Manchester, London, Sydney, N.S.W., Melbourne, Cape Town.

PAINT AND VARNISH MAKERS

ANDREW MUIRHEAD,
82 Bay St., TORONTO.
Manufacturer of Paints, ground in Oil, Water, and Japan. Putty, Varnishes, Japans, Enamels, Builders', Manufacturers' and Painters' Supplies. Importer of Creosote Shingle Stains, Deafening Quilt, &c., &c.

BRANDRAM-HENDERSON, LIMITED
MONTREAL, HALIFAX,
ST. JOHN, WINNIPEG
White Lead, Color, Paint and Varnish Manufacturers.

PAINT AND VARNISH MAKERS

ISLAND CITY PAINT & VARNISH WORKS.
Makers of Permanent Reds, Greens, and Yellows, Carriage Varnishes, Wagon Varnishes, Furniture Varnishes, Japans, Finest Ground Colors in Oil or Japan.
P. D. DODS & CO.,
MONTREAL TORONTO VANCOUVER

THE IMPERIAL VARNISH & COLOR CO., Limited, TORONTO.
Manufacturers of Fine Varnishes, Japans, Enamels, etc.

A. RAMSAY & SON, MONTREAL.
Manufacture Paints, Varnishes, etc. Import Glass, Brushes, Artists' Materials, Painters' Tools, etc.

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Largest Paint and Varnish Makers in the World.
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NEW YORK CLEVELAND CHICAGO

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Georgetown, Ont.
PAPER MAKERS.

THE RIORDON PAPER MILLS, Limited,
Merritton and Hawkesbury, Ont.
Merritton Mill—News Paper, Hanging Paper, Wrapping Paper and Building Paper, and Sulphite Pulp.
Hawkesbury Mill—Sulphite Pulp.

THE TORONTO PAPER MFG. CO., CORNWALL, ONT.
Makers of Super Book.
Envelope and Writing Paper.
Colored Flats and Linen Ledgers.

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Canada Life Bldg., TORONTO.
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RIDOUT & MAYBEE,
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Handbook of Patent Law, etc., sent free on application.

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Laboratories and General Offices, WALKERVILLE, ONT.
Eastern Depot, 378 St. Paul St., MONTREAL, QUE.

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THE BELL PIANO & ORGAN CO., Ltd., GUELPH, ONT.
Manufacturers of High-Grade Reed Organs, Upright and Grand Pianos, and Automatic Piano and Organ Players.
Branches at 49 Holborn Viaduct, London, E.C., 15 Bridge St., Sydney, N.S.W.

PIANO AND ORGAN SUPPLIES

THE OTTO HIGEL CO., Limited,
Mechanical Experts and Manufacturers of Special Machinery, Piano Actions, Keys and Hammers, Organ Keys, Reeds and Boards.
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Sole Manufacturers of Mica Coverings for Steam, Hot and Cold Water Pipes, Boilers, Flues, etc, Refrigerating Plants, Dealers in Engineers' Supplies.

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Plows—Walking, Gang, Sulky. For Canadian and Foreign Trade.
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Babbitt Metal, Lead Pipe, Lead Traps, Lead Shot, Colors in Oil, Colors in Japan; Putty, Ready Mixed Paints, White Lead, Metals, Painters' and Plumbers' Supplies, Saws and Varnishes.

SOMERVILLE LIMITED.
General Office, 59 Richmond St. East, TORONTO.
Manufacturers and Jobbers of Plumbers Supplies, Steamfitters' Supplies, Iron Pipe and Fittings, Valves, Tools, Sheet Lead, Pig Lead, Solder, Lead Pipe, Lead Traps and Shot.

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Steam and Power Pumps of every description for all services.

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Sovereign Radiators for Hot Water or Steam Heating.
Prices on application.
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Railroad Ploughs, all kinds.
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Wheelbarrows and Trucks, every description.
Prompt Delivery "ALL CANADIAN MADE."

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Iron and Copper Rivets, Iron and Copper Burrs, Bifurcated and Tubular Rivets, Wire Nails, Copper and Steel Boat and Canoe Nails, Escutcheon Pins, Leather Shoe and Overshoe Buckles, Bit Braces, Felloe Plates.

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THE CANADIAN RUBBER COMPANY OF MONTREAL.

Sole makers of the Celebrated **"Canadian" Rubbers**, for over 50 years the inspiration of the trade for "Looks" and "Wear." Special attention given to the Export trade.

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THE CANADIAN RUBBER CO. OF MONTREAL.
Branches at HALIFAX, MONTREAL, TORONTO, WINNIPEG, VANCOUVER

Manufacturers of all kinds of High-Grade Mechanical Rubber Goods, Belting, Hose, Packing, Light Mechanical and Moulded Rubber Goods, Druggists' Sundries.

THE GUTTA PERCHA AND RUBBER MFG. CO. OF TORONTO, Ltd.

Manufacturers of all kinds of Rubber Goods for Mechanical Purposes, Rubber Belting, Packing, Water Hose, Steam Hose, Air Drill Hose, Brewers Hose, "Maltese Cross" Carbolized Rubber Fire Hose, Solid and Pneumatic Tires.

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SAWS.

If the Maple Leaf is on your Saw, it is a guarantee that you have the best.

Manufactured only by
SHURLEY & DIETRICH, GALT, ONT.

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Manufacturers of Sawmill Machinery, and Water Wheels, Mining and Pulp Mill Machinery, Engines and Boilers, Transmission Machinery.

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Established 1856.
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Manufacturers of Standard Scales and Trucks.

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THE CANADA SCREW CO., HAMILTON.

Wood Screws, Wire, in coils and straight lengths, Wire Nails, Stove and Tire Bolts, Rivets, Machine Screws, Nuts, Burrs, Bright Wire Goods, etc..

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THE STANDARD SHIRT CO., Limited, MONTREAL.

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Manufacturers of
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GEO. A. SLATER, Shoemaker, MONTREAL.

Goodyear Welts Exclusively.
Men's, Boys' and Women's.

Factory capacity 1,000 pairs per day.

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ILLUMINATED SIGNS, &c.

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Manufacturers of Table and Hollow Ware, Enamelled Belt Buckles, Brooches and Novelties, Medals, Badges and College Pins. Staple Silverware of all classes.

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Manufacturers of the finest quality of Electro-Silver Plated Wares. If interested write for catalogue.

THE TORONTO SILVER PLATE CO., Ltd.

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Silversmiths and Manufacturers of Electro Silver Plate of every description.
E. G. GOODERHAM, Managing Director.

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Manufacturers of Soil Pipe and Fittings, Sinks and Boiler Stands. Telephone, Park 335.

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"Speedicut" High Speed Steel, Tool Steel, Axe Steel, Saw Steel, Files, etc.
A large stock carried in our warehouse.
51 St. Patrick Street, MONTREAL

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Steel Stamps and Die Sinking
Hamilton Stamp & Stencil Works, Ltd.,
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H. Barnard, President, B. Broughton, Vice-Pres. G. Gomm, Sec.-Treas.
Die Sinkers and Manufacturers of Steel Stamps, Steel Letters and Figures etc. Canadian Agents for the BRADLEY STENCIL MACHINE.
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NATIONAL STOVES

Are the latest in style and practical improvements for hard coal, soft coal or wood.

THE McCLARY MFG. CO.,

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Manufacturers of Tents, Awnings, Flags, Sails, Waterproof Covers, Clothing, Coal Bags, Life Belts, Life Buoys and every description of Camping Goods. Tents and Camping Outfits to rent.

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Separators, Clover Hullers and Attachments of all kinds, Threshing Engines, Traction and Portable, Sweep and Tread Powers. Portable Saw Mills and Saw Mill Engines. Roadmaking Machinery, Graders, Scrapers, Rollers, etc.

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Prices on application.

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Capacities up to 100,000 per day. Perfect Carless Brick and Tile Driers.
Wheel Scrapers. Barrows, etc.

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Galvanized Steel Pumping and Power Windmills, Gas and Gasoline Engines. Grain Grinders, Iron and Wood Pumps, Tanks, Water Supplies, Custom Galvanizing.
Automatic Concrete Mixers.

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	Winnipeg, Man.	

THOS. C. IRVING, Gen. Man. Western Canada, Toronto.

The Mail and Empire. TORONTO, CANADA

Statement, showing exact circulation, day by day, from January 1st, 1907, to December 31st, 1907

DAY	JAN.	FEB.	MARCH	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1	54,010	37,678	38,591	39,652	39,147	46,280	57,812	40,303	61,490	39,709	38,595	.....
2	41,291	44,135	45,211	38,761	39,411	.....	39,809	40,302	41,172	39,439	44,476	38,713
3	37,141	.....	.....	38,847	39,310	40,710	39,949	46,745	42,348	39,302	.....	38,045
4	36,991	38,175	39,130	39,268	45,773	39,533	39,957	.....	41,435	39,175	38,835	38,452
5	43,536	37,817	38,796	39,705	.....	39,483	40,073	60,717	41,480	45,402	38,237	38,379
6	.....	37,831	38,702	45,528	40,097	39,569	46,344	40,536	47,346	.....	38,226	38,260
7	37,539	37,861	39,978	.....	39,139	39,488	.....	40,324	.....	39,910	38,168	44,530
8	37,378	37,733	38,923	39,740	39,221	45,785	40,683	40,335	41,113	39,241	37,978	.....
9	37,422	44,267	45,375	39,152	39,236	.....	40,244	40,220	40,042	39,066	44,189	38,735
10	37,484	.....	.....	38,939	39,402	40,054	40,267	46,916	39,887	39,328	.....	38,240
11	37,554	38,398	39,487	38,909	45,732	39,828	40,292	.....	39,729	39,110	38,467	38,220
12	43,778	37,819	38,653	39,025	.....	39,900	39,905	40,882	39,653	45,450	37,972	38,255
13	.....	38,178	38,788	46,246	40,042	40,018	46,517	40,198	45,834	.....	37,737	38,126
14	37,963	38,079	38,811	.....	39,393	39,885	.....	40,205	.....	39,844	37,803	41,299
15	37,258	38,058	38,713	39,763	39,458	46,098	40,692	40,398	40,324	39,197	37,686	.....
16	37,755	44,368	45,201	39,267	39,338	.....	40,128	40,362	39,601	38,830	44,109	38,828
17	37,266	.....	.....	39,192	39,415	40,413	40,407	47,243	39,788	38,867	.....	38,171
18	37,203	38,622	39,456	39,372	46,088	39,810	39,915	.....	39,821	38,857	38,325	38,321
19	43,910	38,154	38,755	39,330	.....	40,450	40,130	41,065	39,755	44,786	37,777	38,150
20	.....	38,320	38,773	45,907	40,843	40,272	46,827	40,354	45,876	.....	37,773	38,034
21	37,803	38,270	40,294	.....	39,878	39,969	.....	40,347	.....	39,144	37,707	44,517
22	37,132	38,408	38,826	40,579	39,663	46,313	40,816	40,539	40,326	38,605	37,706	.....
23	37,406	44,771	46,728	39,375	39,522	.....	40,221	40,552	39,367	38,518	44,099	38 582
24	37,447	.....	.....	40,155	59,606	40,511	40,101	47,005	39,565	38,490	.....	43,141
25	37,334	38,955	39,591	39,383	46,760	39,673	40,125	.....	39,688	38,442	38,323	59,174
26	44,126	38,336	38,715	39,203	.....	39,561	40,532	40,855	39,651	44,630	37,613	39,384
27	.....	39,432	38,702	45,722	40,619	39,486	46,703	40,858	45,982	.....	37,883	38,081
28	38,035	38,532	38,972	.....	39,754	39,506	.....	41,100	.....	39,254	37,928	43,921
29	37,470		56,394	40,116	39,550	45,960	40,786	41,095	40,493	38,477	37,994	.....
30	37,581		45,627	39,411	39,741		40,135	41,583		38,469	44,099	38,703
31	37,633		.....		39,559		40,177	48,110		61,143		38,027
TOTAL	1,057,446	942,197	1,065,192	1,050,547	1,115,697	1,028,555	1,129,547	1,149,149	1,051,766	1,100,685	1,019,705	1,047,288

Net Daily Average for 1907, - - 40,760

A NET GAIN OF **2,122** OVER AVERAGE FOR 1906

This is a sworn statement of ACTUAL CIRCULATION—NOT PRESS RUN

Some papers flaunt sworn statements of their PRESS RUN as "*CIRCULATION.*" Such a statement includes spoiled and unsold copies —everything, indeed, that they *intend to print*, always *more* than they *really do* print, and *many more than their actual distributed circulation.* This is misleading.

Above is the ACTUAL CIRCULATION OF THE MAIL AND EMPIRE. It does include free copies but it is circulation, every bit of it.

WHERE THEY GO

Further, in order to fatten a circulation statement, some publishers push for a circulation at reduced prices, far beyond the geographical limit within which the paper may be read on day of publication. A daily paper of yesterday is a dead thing, and of little value as an advertising medium. Discriminating space buyers always insist on knowing just where a circulation is distributed. THE MAIL AND EMPIRE has, therefore, pleasure in presenting a sworn statement of the distribution of the circulation, as follows :

IN ONTARIO, 39,741 — **OUTSIDE OF PROVINCE, 1,019**

TORONTO CITY, 17,875 — **ONTARIO, OUTSIDE OF CITY, 21,866**

OFFICIAL DECLARATION

DOMINION OF CANADA
CITY OF TORONTO
To Wit:

I, WILLIAM JAMES DARBY, of the City of Toronto, in the County of York, Circulation Manager of "THE DAILY MAIL AND EMPIRE" newspaper, do solemnly declare:—

That the average number of copies of "THE MAIL AND EMPIRE," circulated daily during 1907, within a radius of five miles from the corner of King and Yonge streets, Toronto, was Seventeen Thousand, Eight Hundred and Seventy-five (17,875).

That the average number of copies circulated daily within the Province of Ontario (not including the district above mentioned) was Twenty-One Thousand, Eight Hundred and Sixty-Six (21,866).

That the average number of copies circulated daily outside of the Province of Ontario was One Thousand and Nineteen (1,019).

That the total daily average circulation for 1907 was Forty Thousand, Seven Hun red and Sixty (40,760).

And I make this solemn declaration, conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath, and by virtue of the Canada Evidence Act, 1893.

Declared before me at Toronto, this 9th day of January, 1908.

NOTARIAL SEAL

Notary Public in and for the Province of Ontario

Circulation Manager

Executive Council

JANUARY MEETING.

Much business transacted at Hamilton meeting—Report of officers—Should the Government renew subsidy to Canada-Australia steamship service ?—A tariff department for the Association again recommended—More customs inspectors should be appointed—Several manufacturers admitted to membership—London office discontinued for present—Amendments to acts affecting incorporated companies—Criticism of new Insurance Act—Agitation for technical education growing—Will publish trade index this year—Report of Commercial Intelligence Committee.

The regular monthly meeting of the Executive Council was held in the Board of Trade Rooms, Hamilton, on Thursday, January 16th, at 2.30 p.m.

The President, Hon. J. D. Rolland, occupied the chair ; other members present being G. Frank Beer, Toronto ; Henry Bertram, Dundas ; C. A. Birge, Hamilton ; J. A. Coulter, Ingersoll ; J. S. N. Dougall, Montreal ; W. R. Dunn, Hamilton ; S. W. Ewing, Montreal ; John Firstbrook, Toronto ; Atwell Fleming, Toronto ; H. W. Fleury, Aurora ; E. J. Freyseng, Toronto ; S. R. Hart, Toronto ; E. G. Henderson, Windsor ; R. Hobson, Hamilton ; Alf. Jephcott, Toronto ; F. E. Leonard, London ; J. B. MacLean, Toronto ; C. R. McCullough, Hamilton ; James McLauchlan, Owen Sound; J. P. Murray, Toronto; Carl Riordan, Montreal ; Thos. Roden, Toronto ; A. S. Rogers, Toronto ; W. H. Rowley, Hull ; T. A. Russell, Toronto Junction ; Alex. Saunders, Goderich ; J. H. Sherrard, Montreal ; Chas. A. Smart, Montreal ; Arthur W. White, London ; R. J. Whyte, Smith's Falls ; S. M. Wickett, Toronto ; C. C. L. Wilson, Ingersoll ; Dan Wilson, Collingwood.

The minutes of the December meeting, as reported in INDUSTRIAL CANADA, were taken as read.

COMMUNICATIONS.

Communications were received as follows :

1. From the following members of the Executive, regretting their inability to be present : Messrs. C. H. Waterous, J. W. Cowan, Louis Simpson, C. Bermingham, J. H. Burland, Wm. Cauldwell, J. H. Housser, W. B. Tindall, J. J. McGill, Henry Stroud, Wm. Stone, George Booth and Wm. Robins.

2. From Mr. Raymond L. Haskins, asking permission on behalf of a number of wine manufacturers, to organize what would be known as the Wine Growers' Section of the Association. On motion of Mr. Roden, seconded by Mr. Henderson, it was unanimously decided to accede to Mr. Haskins' request.

The officers of the Association then reported as follows :

PRESIDENT.

Mr. Rolland referred to the fact that a deputation of pulp and paper manufacturers had again waited upon the Dominion Government, to urge that the export of pulp-wood, in its unmanufactured state, be prohibited. In this connection he dwelt upon the necessity of taking steps to preserve our forests and water powers, and to make the most out of the wood which had to be cut for commercial purposes. While he doubted very much whether anything would be done at the present session, he felt convinced that sooner or later their agitation would bear fruit.

SECRETARY.

The Secretary reported with regret the death of Mr. E. Tougas, a member of the Executive Council from Montreal, and Dr. F. J. Smale, formerly a member of the Executive from Toronto. It was unanimously resolved that a letter should be sent by the Secretary to the bereaved families, conveying to them the sympathy of the Council.

TREASURER.

In the absence of Mr. Booth, the financial statement for the month was presented by the Secretary, and regularly adopted. It showed receipts of $3,911.41, and disbursements of $4,075.33, leaving a balance to the credit of the Association from the first of its financial year of $15,070.89.

FINANCE.

The report of the Finance Committee, as presented by Mr. Firstbrook, recommended for payment the regular monthly accounts amounting to $1,628.40.

It took occasion to point out, in connection with an expenditure incurred by the Furniture Section, that the by-laws of the Association did not make it sufficiently clear that the Sections' authority to spend 10 per cent. of their revenue was not retroactive, and in order that in future the Sections might not make the mistake of assuming that they could spend double the amount one year by virtue of their failure to expend anything the previous year, the Committee reported that at the next annual meeting they would propose an amendment to the by-laws covering this point.

The complaint of the Toronto Branch that they were being overcharged on certain items in connection with the distribution of expenditures, had been considered in conference with representatives of the Branch, and the Committee was pleased to report that after the situation had been fully gone into all parties had agreed to allow matters to stand as they were.

Travelling Expenses of Members.

A ruling was asked from the Council in regard to the payment of travelling expenses incurred by members when doing work on behalf of the Association. The Committee reported that a stated case had been under consideration, but that as it involved a principle which might have far reaching effects, they preferred to leave it for the Council to deal with.

Mr. Rowley thought that each case should be referred to the Association's auditor, while Mr. Birge believed it preferable to allow matters to stand as at present, so that the Finance Committee could deal with each case on its individual merits. Mr. Wickett pointed out the difficulty of establishing any fixed rule, on account of the fact that it was sometimes necessary for the chairman of a committee to take action before the consent of the Finance Committee could be obtained. He favored the idea, therefore, of referring the whole question back to the Finance Committee for a definite recommendation, and a motion to this effect, seconded by Mr. J. P. Murray, coupled with a suggestion that the report of the Committee be presented at the next meeting of the Council, was carried.

A supplementary report by the Finance Committee, recommending the re-engagement of Mr. Murray as General Secretary, Mr. Walsh as Manager of the Transportation Department, and Mr. Scully as Assistant Secretary, all for one year, was also adopted.

RAILWAY AND TRANSPORTATION.

The Chairman, Mr. W. R. Dunn, read the report of the Railway and Transportation Committee.

The following extracts indicate the principal matters dealt with :

Reorganization of Board of Railway Commissioners.

The deputation, which waited upon the Premier and Minister of Railways and Canals in Ottawa on December 5th, presented the resolution passed by the Association in convention in September last. Assurances were given that when the Government took action every consideration would be given to our representations.

Bill of Lading, Reciprocal Demurrage and Weighing Carload Traffic.

The deputation which waited upon the Board of Railway Commissioners on the same date was received by the full Board. An opportunity was given to present our views fully in these important matters. We were assured that the Board appreciated their importance, and that some action would probably be taken at an early date, particularly in regard to the uniform bill of lading.

Readjustment of Rates.

The new tariffs, as ordered by the Board of Railway Commissioners on July 6th, 1907, in what is known as the International Rate Case, became effective on January 1st. These tariffs represent a general revision of rates throughout Eastern Canada. When the order was made it was expected that the tariffs would become effective not later than October 1st, but for reasons best known to the railways they were delayed, and it became necessary for your Committee to urge upon the Railway Commission to fix a date when they would take effect. We have assurance that the tariffs ordered, applying on international traffic east-bound from Central Freight Association territory are in the course of preparation, and will be issued at an early date.

These latter tariffs will be governed by the Canadian Freight Classification, which will advance all class rates below first.

In reply to a communication to the Board respecting the new tariffs, we were advised as follows : "We have arranged for checking up of the rates, class and commodity, issued or being issued under the orders of the Board in the International and Toronto Board of Trade Rate Case." This gives us the assurance that if there are any tariffs which do not comply with the spirit of the order they will be rejected.

Rates to the North-West, British Columbia and the Kootenay.

The railways have issued new tariffs, effected December 23rd and 26th, reducing the rates from Eastern Canada to the above points.

Rates Out of Winnipeg.

A communication has been received from the Chairman of the Manitoba Branch tendering their thanks for the assistance given the Branch in preparing for the hearing before the Chief Commissioner in regard to these rates, which was held on January 7th. The matter is to be further heard in Ottawa on January 27th, and the manager was instructed to attend the hearing in the interest of the Association.

Canada-Australia Steamship Service.

The amount usually voted for this service was not placed in the estimates recently submitted to Parliament. The Government feels that there is little use in Canada subsidizing a line in the face of the present discouraging trade conditions, and especially in view of the fact that 75 per cent. of the Canadian goods appear to be exported by way of New York. The present contract expires August 1st. The whole matter is still under negotiation. In view of this your Committee do not feel that they should take any action for the present at least.

Improvements to Water-ways.

Your Committee has for some time had before it a resolution passed by the Toronto Board of Trade, endorsing the Huron and Ontario Ship Canal project. The subject is a very broad one. The manager was instructed to read to the Executive the resolution referred to, and say that your Committee will be prepared to submit at the next meeting a resolution dealing with improvements to water-ways generally. This notice is given in order that a full discussion may be invited.

Express Matters.

A preliminary hearing was held in Montreal on December 12th, 13th and 14th. It was confined to the construction of the express tariffs, and the value of the service to the public. The investigation will be resumed about the middle of January, when the specific tariffs filed with the Board will be considered.

Mr. Rowley took occasion to congratulate the Committee upon the splendid work it had done in bringing about a readjustment of rates in the territory east of Port Arthur and the Detroit frontier. He thought that the benefits to the membership in the territory affected were so pronounced that a general circular should be issued by the Department, calling attention to the real significance of what the Association had achieved.

Shipments via Canadian Ports.

In connection with the discontinuance of the subsidy to the Australian steamship line, and the proposal to limit the benefits of the Franco-Canadian treaty to goods coming directly from or going directly to France, a general discussion arose regarding the volume of business entering Canada by United States ports. Mr. Dougall expressed surprise at the statement that 75 per cent. of our exports to Australia went via New York. Mr. Saunders referred to the stand which he had taken at the Winnipeg Convention in regard to the facilities afforded by the C. P. R. for shipping via Vancouver. He believed that Canadian exporters did not appreciate the advantages which that line had to offer. Personally he had always found their rates just as low as any he could get by New York, and he thought they should be encouraged much more than they were. He also pointed out that existing conditions led to serious misapprehensions regarding the distribution of Canada's exports, the ultimate destination being very frequently concealed owing to the fact that shipments were made through New York. Mr. Dougall moved that the clause referring to the Australian subsidy be referred back to the Committee for a further report. His motion was seconded by Mr. Russell, who believed that the Australian tariff, as finally adopted, would not be so inimical to Canada as at first anticipated, and that rather than cut off the subsidy to the line via Vancouver, it should be continued and another line subsidized from Montreal or some Eastern Canadian port. On a vote having been taken Mr. Dougall's motion was carried.

Improvement of Water-ways.

Referring to the resolution of the Toronto Board of Trade endorsing the Huron and Ontario Ship Canal project, Mr.

Henderson thought it was quite futile for the Council to undertake in an academic way to pronounce as between this route and the Ottawa River Canal. Mr. Birge was opposed to the Association taking any stand whatever on the question, owing to the fact that sectional differences were likely to arise ; he accordingly moved, seconded by Mr. Saunders, that this clause be struck out of the Committee's report. Carried.

TARIFF.

The report of the Tariff Committee was read by Mr. J. P. Murray, and on motion of Mr. Birge it was considered clause by clause as follows:

Leeway in the Dumping Regulations.

As no move has been made either by the rolling mill men or by the bridge builders to bring about a meeting for the purpose of reconciling their conflicting views as regards the leeway of 5 per cent. provided in the dumping regulations in the case of certain iron and steel articles, instructions have been given the Secretary to communicate with the parties affected suggesting that the leeway be abolished on all articles of iron and steel except channels, beams and sheets.

Mr. A. W. White inquired why should not the leeway be abolished on all classes of goods, instead of making certain exceptions, to which Mr. Hobson replied that the articles mentioned were virtually not being made in Canada. On explanation by the Secretary that the suggestion as regards beams, channels and sheets was only a suggestion, thrown out with a view to effecting a compromise, it was agreed to allow this clause to pass.

Establishment of Tariff Department.

Your Committee regarded it as unfortunate that there was so small an attendance at its Ottawa meeting of those who were prominent in advocating the establishment of a Tariff Department in connection with the Association, as it is believed that a large majority of the members of the Committee are strongly in favor of proceeding at once in this matter. It is, we believe, of vital importance to members of the Association generally that we should have at our disposal at the earliest possible date the services of an expert tariff officer to investigate all tariff grievances, and report on same in a thoroughly scientific manner. It is now recommended, therefore, that steps be taken to establish the department forthwith, instead of waiting until the Government has been induced to appoint a Tariff Commission.

The question was raised whether the Association would be able to finance the proposed department. On motion of Mr. Ewing, seconded by Mr. Henderson, a motion to adopt this clause was carried, provided the Finance Committee could find ways and means.

Duty on Plaster Sacks.

At the request of the Manitoba Gypsum Company and the various bag manufacturers, it is recommended that the Association endorse their application to the Minister of Finance to impose a duty of two cents on every bag used in connection with the importation of wall plaster. This is no more than is done in the case of bags when used for carrying Portland cement, and your Committee feel that the application of the parties referred to is just and reasonable.

Mr. Henderson took exception to this clause, on the ground that it was not wide enough in its application. On motion of Col. Smart, seconded by Mr. Henderson, it was decided to amend the clause by asking for a duty of two cents per bag on all jute or cotton bags used in connection with the importation of any commodity whatsoever.

Separate Inspectors for the Various Trades.

Applications have been received from the Furniture Section, and from a prominent firm in the boot and shoe industry, asking the Association to recommend to the Government that special officers be attached to the outside service of the Customs Department for the purpose of investigating all cases of under-valuation which are reported in these respective trades. In support of these applications they point out that the facts of a case can be arrived at much more quickly, and more accurately by one who is technically familiar with the details of the trade than by one who has no special knowledge of it. There can be no doubt that a considerable amount of dumping is going on which escapes the attention of the customs officers, and particularly at the present time when so much pressure is being brought to bear upon United States manufacturers to sacrifice their stocks, is it desirable that the Government should have at its disposal the services of more than five men, which is the number of officers now employed.

Franco-Canadian Treaty.

Your Committee has spent some little time discussing the above question, but they feel that in a matter of such great importance to the whole of Canada no action should be taken without first sifting the proposition to the very bottom. It is proposed to call a special meeting to consider the same on Tuesday next, in order that the views of the Association may be made known before the treaty is disposed of in the House, and the Council is now asked to empower the Committee to express on its behalf the official attitude of the Association towards this treaty.

Mr. R. J. Whyte took strong exception to the above clause, as he believed it to be too important a matter to be referred to any one Committee to decide. He thought that the proper procedure would be to do the same as had been done a year ago, when the tariff revision was announced, that is to say, to call all the sections together, and let them deal as they saw fit with the items in which they were directly interested.

As against this, Mr. Murray pointed out that the treaty would likely pass the House before another meeting of the Executive, and if the Association were to take action at all it must do so promptly. Should it transpire that there would be time for the Tariff Committee to report to the Council before making the Association's views public, they would assuredly do so, but they wished to be empowered to speak for the Association in the event of an early debate on the treaty making such a course desirable.

Mr. Whyte reiterated his belief that the Tariff Committee should act only on the request of the sections after full consideration had been given by the latter to their own trade interests. He therefore moved, seconded by Mr. Sherrard, that any recommendations by the Tariff Committee in connection with the Franco-Canadian treaty be made only on the request of individual industries concerned. Carried.

The adoption of the report as amended, moved by Mr. Murray, seconded by Mr. Roden, was then carried.

RECEPTION AND MEMBERSHIP.

The report of the Reception and Membership Committee recommended for acceptance the following applications :

COLLINGWOOD.
Collingwood Shipbuilding Co.

GUELPH.
Sleeman & Sons.

HAMILTON.
Canadian Shovel and Tool Co. (F. Skelton, 2nd mem.).
Raymond L. Haskins.

MEAFORD.
The Georgian Bay Milling and Power Co., Ltd.

MONTREAL.
Canada Newspaper Syndicate, Ltd.
The Auto Strop Safety Razor Co.

NIAGARA FALLS.
The Stamford Park Wine Co.
T. G. Bright & Co.

OTTAWA.
W. H. Dwyer Co., Ltd.

PRESTON.
Preston Car and Coach Co., Ltd.

PRICE, QUE.
Metis Lumber Co.

QUEBEC.
Campbell Shoe Company.

SANDWICH.
Girardot Wine Mfg. Co., Ltd.

STRATFORD.
The McLeod Milling Co.

ST. CATHARINES.
Hillrust Wine Manufacturing Co.

TORONTO.
The House of Hobberlin.
Imperial Varnish and Color Co. (T. F. Monypenny).
Brunswick-Balke Collender Co.

WELLAND.
Canadian Billings & Spencer, Lt

Among other things it recommended :

(1) That permission be granted the Quebec Branch to extend its boundaries so as to include all the territory in that province east of a line drawn north-west and south-east from Three Rivers.

(2) That the Secretary be authorized to prepare a small advertising booklet setting forth the objects and work of the Association, at a cost not to exceed $100.

(3) That the invitation of the Montreal Branch to hold a meeting of the Executive Council in that city be accepted for the month of March.

Mr. Ewing took occasion to emphasize the need of an advertising booklet such as the Committee had recommended. On behalf of the Montreal Branch he also assured the Council that they would be glad to have them as their guests for the March meeting.

Col. MacLean suggested that it might be advisable to hold one of the summer meetings of the Executive in the city of Guelph, so that advantage could be taken of the opportunity to visit the Macdonald Technical Institute and the Agricultural College.

Different members objected to the frequent holding of the monthly Council meetings away from Toronto. An amendment, moved by Mr. Henderson, seconded by Mr. Roden, that any decision as to a meeting in Montreal be left until the February Executive, was carried.

BRITISH OFFICE.

In the absence of the Chairman the report of the British Office Committee was presented by the Secretary as follows :

Since the last meeting of the Council the Association's immigration policy has been the subject of much adverse criticism, both in the House of Commons and in the press. Efforts have been made to saddle the Association with responsibility for the unemployed problem, by stating that its London office was used as a means of flooding the Canadian labor market in order to force down wages. False motives have been imputed to it for asking that proceedings be instituted against those agents who have been guilty of misrepresentation, and the statement is now being made that this is simply the Association's way of repudiating the men who have been doing its dirty work.

It is, perhaps, unnecessary to assure the Council that these accusations are absolutely without foundation, for the British office has always been conducted in a fair and business-like manner, with the sole object of supplying members of the Association with help which it seemed impossible to procure in Canada. Your Committee has always been able to defend itself against the accusation that it has contributed in any way whatever to the present unfortunate position of tne working classes, and in answer to the statements made in the House by Mr. Oliver and Mr. Verville, a letter was written by the Secretary on December 24th to papers in Montreal, Ottawa, Toronto and Hamilton, explaining fully the Department's method of operations, and showing that since its inauguration it had only brought out to Canada 527 working people.

A Misleading Advertisement.

At the same time that these charges were being made in the House your Committee received word from Lord Strathcona that Mr. Leopold was advertising in British papers to the effect that there were hundreds of vacancies in Canada for mechanics in all trades. In view of the fact that such an advertisement was palpably misleading, and calculated to lend color to the belief already cherished in certain quarters that the Association was unscrupulous in its methods to encourage the immigration of skilled labor, a cable was at once despatched to Mr. Leopold asking for his explanation, and stating that the advertisement must be immediately withdrawn. A meeting of the Toronto members of the Committee was hastily called to consider his reply, from which it appeared that the advertisement was an old one used in the month of August, which had now been re-inserted by the publisher without authority. Instructions were cabled Mr. Leopold to place a notice in the paper carrying the advertisement to the effect that it was not a correct representation of the situation, and that the manufacturers of Canada, except in a few special lines, were amply supplied with labor for the present. This, however, Mr. Leopold did not do, explaining in a subsequent letter that the paper had only a small circulation, and was already on the verge of bankruptcy. He offered to procure a letter from the editor that would relieve him, as the Association's agent, from all responsibility, and this he has now been asked to do.

Your Committee fully appreciate how unfortunate it is that such an incident should have occurred at the present time when there are so many out of employment, and when the Association is being accused of having brought about the situation, but they feel no blame whatever can be attached to Mr. Leopold.

Applications Cancelled.

As a further precaution against bringing out men for whom there were no positions, the Secretary was asked to communicate with all members whose applications to the Department for labor were unfilled, inquiring as to whether the balance of the help was still wanted. These have now been heard from, and in only one case has the Department been instructed to proceed with the order. Mr. Leopold has accordingly been requested to cancel all applications, except this one, for the time being.

Discontinue the Office.

In view of the above condition of affairs suggestions were made to the Committee that it might be well to discontinue the British office, until such time at least as there might be further need of its services. Your Committee has given this suggestion serious consideration, and has at the same time

looked carefully into the financial standing of the office as requested at the last meeting of the Council. Out of a total of 527 hands engaged to date, 58 were unsatisfactory or never reported. The fees with which the Department has been credited for having engaged the remainder total up to $1,382, of which $725.75 has been collected. The total disbursements to December 31st were $2.116.76, so that assuming that all the book debts were collectable there would still be a deficit for the year of $734.76. The final deficit, however, is likely to run considerably over this amount, because of the fact that there are still a number of cases of dissatisfaction to be dealt with.

After having given due consideration to this aspect of the case, and, further, in view of the fact that there is little likelihood of there being any marked scarcity of labor for the next six months or possibly longer, your Committee recommend that the British office be temporarily discontinued, and that Mr. Leopold be given three months' notice.

In moving the adoption of the report, which was seconded by Mr. Firstbrook, Mr. Beer criticized the Committee for fixing its scale of fees too low. He did not see how the work could possibly be done at such a moderate scale of charges. Mr. Beer's motion was duly carried.

PARLIAMENTARY.

The report of the Parliamentary Committee, as presented by Mr. A. S. Rogers, dealt among other things with the following matters :

Prosecution of Unscrupulous Agents.

In accordance with instructions given by the Council, the Secretary had forwarded all papers connected with the unauthorized engagement of some twenty weavers for a certain Toronto company to the Labor Department at Ottawa, with the request that the offenders be prosecuted under the Merchants' Shipping Act. At the suggestion of the Department additional documentary evidence had been procured to strengthen the case, and the Committee was now advised that the whole matter would at once be laid before the home authorities.

Misrepresentations by Mr. Trotter.

The attention of the Committee had been directed to the misleading statements which were being made about Canada by Mr. W. C. Trotter, the special delegate sent to England by the Trades and Labor Congress. If the British press reported him correctly, his speeches grossly exaggerated the unemployed situation, and were calculated to do the country much harm. Regret was expressed that organized labor should have adopted such a questionable policy to deter immigration, but the Committee deprecated the suggestion to answer Mr. Trotter in any way, as it might only lead to a controversy which would serve no useful purpose.

Amendment to the Criminal Code.

In connection with the campaign of the Retail Merchants' Association for an amendment to the criminal code, which would place merchants, manufacturers and employers on the same level as trade unions, so far as combinations for their mutual protection were concerned, it was recommended that no action be taken.

Ontario Assessment Act.

It had been decided to ask Mr. McNaught, M.P.P., to reintroduce the amendment to the Assessment Act, which was put forward last year, exempting from the income tax the salaries of officers in incorporated companies who are also stockholders of the companies.

Franchise for Incorporated Companies.

It was recommended that the Association's desire that incorporated companies should have a vote on all money bylaws, should be put in the form of a draft bill and forwarded to all the provincial branches for introduction into their respective legislatures.

INSURANCE.

The report of the Insurance Committee was presented by Mr. Alfred Jephcott. It will be found in the front of INDUSTRIAL CANADA.

Mr. Jephcott requested that an opportunity be given Mr. Heaton to explain more in detail a few of the important features of the new Insurance Act which it was recommended the Association should oppose, but as Mr. Hobson pointed out the printed report was already so lucid that it did not require further explanation.

A suggestion that copies of the report be sent to all members of Parliament, and the leading Boards of Trade throughout Canada, was unanimously approved of.

"INDUSTRIAL CANADA."

Mr. C. R. McCullough, the Chairman, reported progress on behalf of the above Committee. The net revenue earned by the paper for the six months ending January was estimated at $1,282. Owing to business conditions the paper had suffered the loss of a number of its old contracts, but these had been more than counterbalanced by the new business which was being turned in by the advertising solicitor.

In connection with the special May edition, which was to contain a classified list of members, it was recommended that the alphabetical list corresponding to Part I. of the Trade Index be omitted on account of the fact that it was exceedingly bulky and of very little value.

TECHNICAL EDUCATION.

The following is the report of the Technical Education Committee, as presented by the Chairman, Mr. Wickett :

It is some months since your Technical Education Committee has had the pleasure of making a report, but in the interval the campaign for the appointment of a Federal Commission of Inquiry has been making steady progress.

Campaign Among Provincial Premiers.

Early in October it was learned that a deputation from the Toronto Reform Association were going to Ottawa to wait upon the Premier, and at the request of your Committee they gladly included Technical Education among the subjects to which they asked the Government to pay increased attention. Sir Wilfrid, in his reply to them, expressed entire sympathy with the Association's proposal, though he candidly told them he wished to avoid even the appearance of interfering with the rights of the Provinces in questions of education. Assuming that his reluctance to act would disappear once the Provincial Premiers had expressed their acquiescence in our petition, a letter was despatched forthwith to each of them explaining the situation, and asking them to forward direct to Sir Wilfrid a letter endorsing the memorial on behalf of their respective Governments, and stating that they would offer no opposition on constitutional grounds. In most cases this appeal was followed up by a personal interview by influential members of the Association in the various Provinces, with the final result that favorable replies were obtained from all the Premiers, except Mr. Gouin, of Quebec, who, while assuring the Association's deputation verbally that he would offer no opposition to the appointment of the Commission so long as the educational rights of the Province under the B. N. A. Act

were not impaired, preferred not to commit himself in writing.

Believing that with public opinion now solidly behind our request, the Government would have no further cause for hesitation, a deputation consisting of Mr. J. F. MacKay and the Secretary was appointed to call upon the Premier and urge the importance of immediate action.

Meanwhile, arrangements were made with Mr. Hugh Guthrie, M.P., to place upon the order papers of the House a resolution favoring a Government Inquiry, so that should the Premier prefer to have the question dealt with in that manner and made a non-political issue, his wishes could be complied with. Influential Conservatives have been approached to lend their support to Mr. Guthrie's resolution, and have gladly consented.

Toronto Technical School.

Your Committee has been freely co-operating with the Executive Committee of the Toronto Branch, and with the Toronto Board of Trade, in an effort to have the Board of Education in that city select a more suitable site for the new Technical High School than the one now chosen on Bloor Street. It is believed that if the school is to be of any real benefit it must be situated in a locality where it will be readily accessible to the majority of students who will wish to attend, and even though it costs a few thousand dollars more, it is felt that it will be far better in the end to purchase a site west of Spadina Avenue. A strong letter setting forth the views of the Committee has been sent to the Board of Education, and a small sub-committee has been appointed to look over the ground for a more suitable site.

On motion of Mr. Wickett, seconded by Mr. Henderson, the report was regularly adopted.

COMMERCIAL INTELLIGENCE.

The report of the Commercial Intelligence Committee was presented by the Secretary as follows :

Trade Commissioner for British West Indies.

It is to be noted with satisfaction that the Department of Trade and Commerce has at length acted on the Association's recommendation by appointing a special trade commissioner for the British West Indies, who will devote his entire time to the work instead of maintaining four correspondents in that field, whose services had never been of a very satisfactory character. While your Committee is not prepared to express any opinion as to the qualifications or ability of the man appointed, they feel it is at least due the Department that a resolution of thanks be tendered them for having acted on the Association's recommendation. It is suggested, therefore, that the Secretary be instructed to forward them the thanks of the Association.

Trade Commissioner for New Zealand.

In view of Canada's increasing exports to New Zealand and the favorable opening there afforded for Canadian goods, it is recommended that representations be at once made to the Government with a view to securing the appointment of a special officer for that territory. At the present time Mr. Larke is supposed to cover the New Zealand field, in addition to his territory in South Australia. It is obvious that he cannot do justice either to Australia or to New Zealand when he has so much ground to cover, so that the appointment of an additional officer would seem to be necessary.

Invitation to Sir Joseph Ward.

Information having been received that the Premier of New Zealand, Sir Joseph Ward, is contemplating a visit to Canada next year, and as there can be no doubt that such a visit would be of far-reaching effect in cementing more closely the commercial ties which bind the two countries together, it is recommended that the Association ask the Dominion Government to extend a cordial invitation to Sir Joseph to pay our country a visit, and to use every effort to obtain his acceptance.

Absorbing the New Zealand Preference.

In the regular letter of the Association's New Zealand correspondent appearing in the January issue of INDUSTRIAL CANADA, mention is made of the fact that some Canadian manufacturers are killing the goose that lays the golden egg by absorbing in the prices they quote the full amount of the preference accorded them. To quote from the letter in question: "A certain line of apparel used mostly by the laboring classes was benefited by the Preferential Tariff to the extent of 20 per cent. Gradually the Canadian price went up until the difference in the landed cost was insignificant, and in some cases there was no difference at all. The Minister of Customs was informed of this and promptly took the preferential duty off and business is now going back to the United States. Even if Canadian manuafacturers reduced their prices again to the level of the foreign manufacturers, the business will go past them, as merchants are disgusted with the manner in which the Canadian manufacturers have appreciated a benefit which was given them, not for the purpose of filling their own pockets, but to keep the foreign manufacturer out." Your Committee can only regret that some Canadian manufacturers should be so short-sighted, for there can be no doubt that such a policy, if persisted in, will jeopardize other Canadian interests, and detract from the fair name of Canadian business houses in foreign countries.

Exhibition Committee.

Careful consideration has been given to the constitution and organization of a department for collecting and disseminating information regarding exhibitions, both Canadian and international, and assisting members in the arrangement and transportation of their displays. It is now recommended that a Committee of five be appointed, the members to be chosen from among the representatives of the Association to the Canadian National Exhibition, such representatives to constitute a sub-committee of the Commercial Intelligence Committee, and to report from time to time through the Commercial Intelligence Committee to the Executive Council. In this way it is believed that all the advantages which are aimed at can be achieved without burdening the Association with additional and unnecessary machinery.

Seed Wheat for North-West Farmers.

The attention of the Committee has been called to the fact that the farmers of Alberta and Saskatchewan are asking for 2,000,000 bushels of seed wheat for next year's planting. The prosperity of Eastern Canada is so vitally related to the prosperity of the West that your Committee feel that no stone should be left unturned to provide the farmers in the West with an abundant supply of seed wheat of good germinating quality. It is, therefore, suggested that the Dominion Government be asked to take steps at once to see that their requirements are met.

BRANCHES.

The report of the Montreal and Toronto Branches, as presented by Mr. Ewing and Mr. Freyseng, were duly received.

Under the head of new business, Mr. Ewing read a letter from Mr. Charles A. E. Harriss, Ottawa, drawing attention to the fact that Canada was to be favored during the present year with a visit from the Sheffield Choir, England, who would prob-

ably be accompanied by the Lord Mayor of Sheffield. In view of the fact that many of the members of this choir were men occupying important industrial positions in Sheffield, who had no doubt helped to entertain the party of the Association who visited England in 1905, and also in view of the fact that on Imperial grounds it was important to have the Association take some recognition of the visit, Mr. Ewing moved, seconded by Mr. Rowley, that a letter be sent to the Lord Mayor of Sheffield, extending to himself and his choir a hearty welcome from the Association. Carried.

The President then called on Mr. Johnston to address the Council on the subject of "Trade Opportunities in South America." Mr. Johnston read a most interesting and valuable paper, for which he was extended a vote of thanks on motion of Mr. Saunders and Mr. Roden. It was also decided to publish the paper in INDUSTRIAL CANADA.

Moved by Mr. Dougall, seconded by Col. MacLean, that the thanks of the Association be extended to the Hamilton Board of Trade for the use of their Council Chamber. Carried.

The meeting then adjourned.

TORONTO BRANCH.

Exhibition Matters.

At the first meeting of the Toronto Branch Executive for the new year, Exhibition matters were discussed, and it was decided that the Branch advocate with the City Council that a good commercial highway, running north and south in the west end, and giving access to the water front, should be provided in the event of the plans for the improvement and extension of the Exhibition grounds obstructing the present thoroughfare, Dufferin Street. It is felt that a main thoroughfare of this kind will be a necessity for western manufacturers when Toronto's harbor facilities are adequately developed and a dock is provided.

An effort will again be made to elect four instead of three representatives on the directorate of the Exhibition, at the annual meeting to be held at the end of January. The Association's candidates will be Messrs. W. K. McNaught, W. K. George, George Booth, and J. P. Murray.

Technical Education Committee.

The Executive, through its Technical Education Committee, in conjunction with that of the Board of Trade, is making an effort to have the site for the new Technical School changed from its present location on Bloor Street East, which is not convenient for the artisan class, who will be attending it, to a site situated further to the west, and nearer to that section of the city in which the bulk of the industrial population reside.

American Foundrymen's Association.

Your Executive is endorsing the application of the American Foundrymen's Association, for the use of some exhibition buildings for their convention and exhibition of foundry appliances, which will be held in Toronto in June next.

Evening Dinners.

The Entertainment Committee of the Branch has arranged for an informal evening dinner at McConkey's on Monday, January 27th, when His Honor the Lieutenant-Governor and Dr. William Pakenham will speak on the subject of "Technical Education." All members of the Association are cordially invited to attend this dinner.

A second evening dinner will be held in February, the subject being "The Relations of Labor and Capital in Ontario," and the speaker, Mr. E. A. DuVernet.

MONTREAL BRANCH.

The Montreal Branch of the Canadian Manufacturers' Association presented the following report to the Executive Council:

The question of municipal reform was taken up by the Montreal Branch this month in a practical manner. A special meeting was held, when members were invited from each ward in the city to consider how good candidates could be brought out in the approaching municipal election While we could not do anything as an organization in this regard, we have brought the matter to the serious attention of our members, and urged upon them the necessity of doing something to provide better government at the City Hall. As a direct result of our agitation the Citizens' Committee called a public meeting and nominated good government candidates in four of the English-speaking wards of the city.

The City Council in its last days of office raised the wages for civic laborers to $2.00 a day. This step was taken by a number of the aldermen purely for election purposes. A letter was drafted by the Montreal Executive protesting against this increase of wage, as being both unnecessary and contrary to the general tendency of industrial conditions when establishments were reducing their hands or cutting down the wages of their employees.

At the funeral of Hon. J. I. Tarte, the Association was represented by Hon. J. D. Rolland, Mr. S. W. Ewing and the Montreal Secretary.

At the meeting of the Montreal Executive on January 9th, Mr. William Johnson, of Buenos Ayres, addressed the members in the interests of Canadian trade with South America.

OBITUARY.

The Association has suffered during the past few weeks in the deaths of a number of its members. In addition to those chronicled in the last issue of INDUSTRIAL CANADA, with regret we record the death of Mr. E. Tougas, of Montreal, who represented P. D. Dods & Co., and was at the time of his death a valued member of the Executive Council.

Mr. Fred. W. Barrett has also passed away within the last few days. Mr. Barrett was manager of The Luxfer Prism Co., and represented that company in the Association.

On January 31st, Mr. D. S. Perrin, of London, died. Mr. Perrin was head of D. S. Perrin & Co., and as such was known from one end of Canada to the other.

EXPORT PRICES FOR WOODEN HANDLES.

The attention of manufacturers of wooden handles and all kinds of turned wood goods is directed to the following extract regarding prices taken from a letter recently received from Mr. Harrison Watson, of the Canadian Commissioner's Office, London, England:

"Resulting from the paragraph in INDUSTRIAL CANADA, relating to manufacturers of wood, and also, we believe, to advice supplied by the Association, we have heard from several Canadian manufacturing firms informing us that they would like to look into the question of obtaining export trade in handles and other wooden lines, and, at the same time, asking us to supply them with prices which are being paid for such goods.

"We think it well to advise, in case of further inquiries, that it is practically impossible to obtain information of this kind. There are immense varieties of goods of all kinds, and the value depends both upon the peculiarities of each particular line, and also upon quality, and whereas it is possible to occas-

ionally get an idea of the value of some standard line, such as fork handles or hammer handles, even in this case the price would be liable to revision, depending upon the particular goods offering.

"We can quite appreciate that the factor of price is of paramount importance to the Canadian manufacturer, as it enables him to ascertain if the trade would be profitable to him or otherwise. We can, however, only suggest that such manufacturers as wish to take up export trade should communicate direct with firms seeking supplies, and forward them samples and their best quotation, c.i.f. United Kingdom port, or, failing that, f.o.b. Canadian port, because when the buyer sees that his Canadian correspondent is really in a position to do business, he may be willing to give him information which he would not furnish to an indefinite application.

"We have spoken to several buyers on the subject, and, although these firms would be glad to obtain supplies from Canada, they all state that it is practically impossible to make prices until they can see samples. We are, of course, pleased to do what we can in the matter, but think it well to inform you as above."

Inquiries are still being received for turned goods, handles, dowels, etc., wood floor and excelsior almost daily at the offices, Toronto, and addresses will be gladly supplied by the Secretary to any Canadian firms who can handle export business in these lines. Particulars as to prices, however, must be obtained from the buyers in England.

WOULD INCREASE EFFICIENCY.

How the workman may be trained and educated that he may develop his abilities to the highest possible point, was the subject for discussion at an evening dinner of the Toronto Branch of the Canadian Manufacturers' Association, on January 27th. The dinner was presided over by Mr. E. J. Freyseng, and among the guests were His Honor Lieutenant-Governor Sir Mortimer Clark, Dr. William Packenham, J. T. Clarke, R. C. Steele, Dr. Ogden, A. H. Leake, and William Houston. The dinner was largely attended.

Sir Mortimer Clark, who was the first speaker, discussed the need for skilled labor and new blood in the industries of the country. He pointed out the great effect of organized technical education in the advancement of such countries as Switzerland, Germany, Great Britain, and France, and urged that what had been proven to be of immense benefit to other countries, should be put in operation here.

The subject was continued by Dr. Packenham, who gave an effective review of what was being done both abroad and at home along the lines of industrial training. Education, with an eye to the life work of the boy and girl, was of practically recent growth. Formerly all education was literary. The importance of cultivating the faculties which would be brought into play in the actual struggle for existence was now at least recognized, though in Canada it was still handicapped by narrowness of conception and insufficiency of facilities.

The boy who is to be the mechanic now goes to school till he is fourteen. During that time he does nothing which is likely to stimulate his zeal to attain manual facility, to develop ideas of proportion, to make him resourceful, to learn the properties of raw materials, their sources and uses. He is then turned out to do what ? The apprenticeship system is practically a thing of the past. He does one of two things: either he becomes a messenger boy or office helper, with no chance of becoming anything else; or he enters a factory, ill-equipped mentally, and learns some simple operation on a machine, and never gets beyond it. It is not of such stuff that foremen are made.

This is where technical instruction comes to the aid of the factory system. Under a proper system the faculties, which must be brought into play in the workshop, should have been given some work to do during the elementary school period, in order that they might be alert, pliable, usable. Technical instruction carries this on a step further. It teaches the young mechanic why he does certain processes, why a given material should be treated in a given way, what enters into the consideration of the practicability of certain products, where substances are found, how bye-products can be utilized. It gives him the synoptic view of his industry, which makes him a capable foreman, a possible manager.

Dr. Packenham pointed out the unreasonableness of the contention that the Federal Government should not interfere in education of any kind. He pointed out that experimental farms were operated under the control of the Department of Agriculture, an engineering course under the control of the Department of Militia. Why not industrial education, under the Department of Trade and Commerce.

Mr. S. M. Wickett reviewed the work of the Technical Education Committee during the past three years, and expressed a hope that a Commission would be appointed at an early date.

Other speakers were Mr. A. H. Leake, Dr. Ogden, William Houston, J. T. Clarke, R. C. Steele, J. S. McKinnon, J. P. Murray, and Thomas Davies.

TRADE WITH INDIA.

Excellent opportunities for Canadian exporters to build up trade with British India are said to await those firms which are prepared to spend a little time and money in working up business there, according to advices recently received from a firm of commission agents in Delhi. This firm claim that there are unlimited fields for profitable trade, particularly among the native states, which are not exploited to the same extent as those in which the British people are more numerous. Any Canadian manufacturer desiring to look into this matter can obtain further particulars, and the address of the firm in question, who are prepared to handle any lines, by applying to the Secretary, Toronto. Excellent references are given, and the firm claim to have had considerable experience in the Indian market.

MAY ESTABLISH CANADIAN BRANCHES.

The Manufacturers' Association of London, Eng., will send their Secretary, Mr. Ben. H. Morgan, to inquire into and report on the condition of the markets in Canada and Australasia. Among other things he will find out for the members the amount of encouragement which would be given to manufacturers establishing branch factories in the different colonies.

Will Do Translating.

French gentleman with commercial training will undertake translation of letters or conduct foreign correspondence. Address Box A, care of INDUSTRIAL CANADA, Toronto.

A Ship Subsidy Estimate.

J. H. Sinclair, M.P., estimates that if the Dominion Government would grant a bonus on steel shipbuilding of $4.00 per ton for sail and $6.00 per ton for steamers, this would be enough to enable steel shipbuilding to be carried on in Nova Scotia. He predicts that within five years from the time such a bonus is established, a fair start will have been made.

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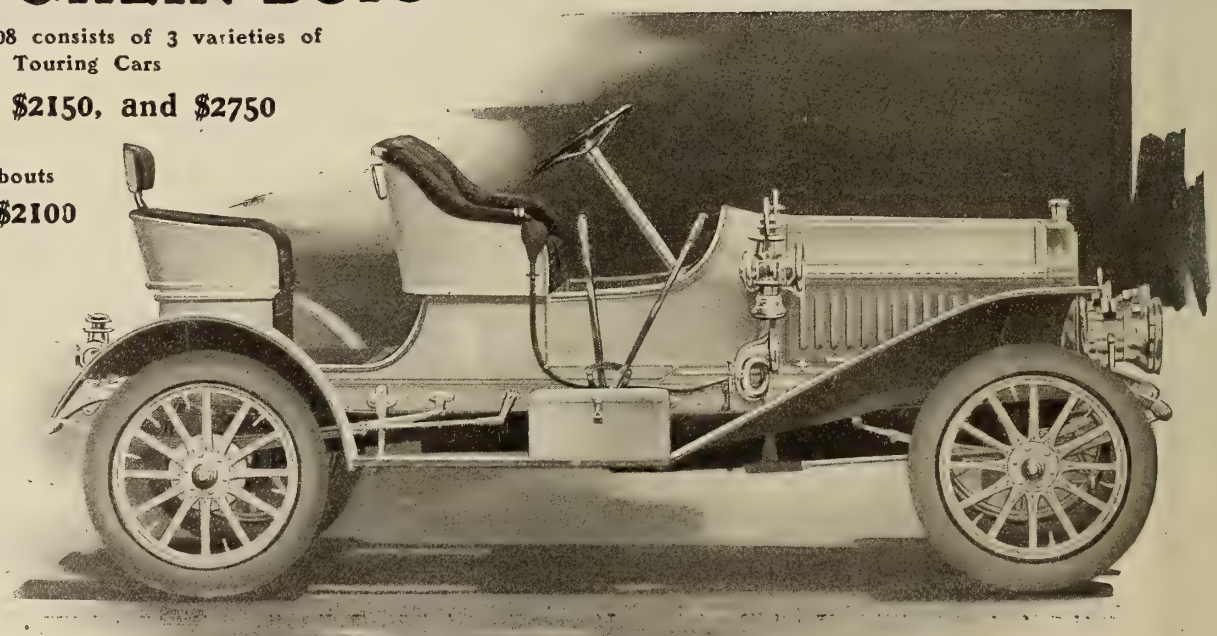
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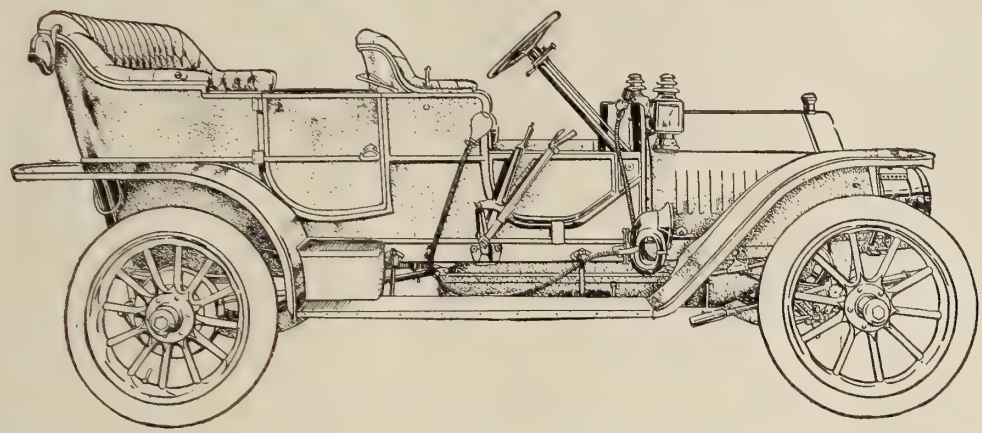
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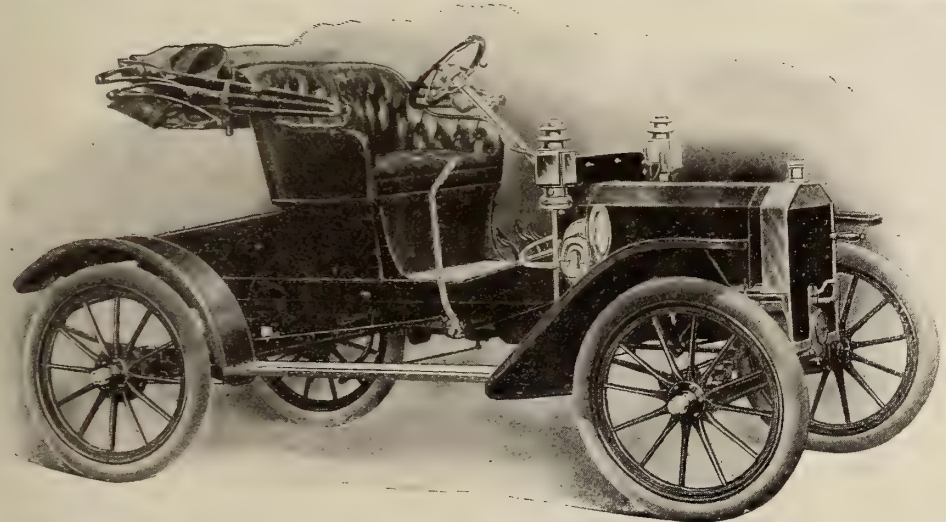
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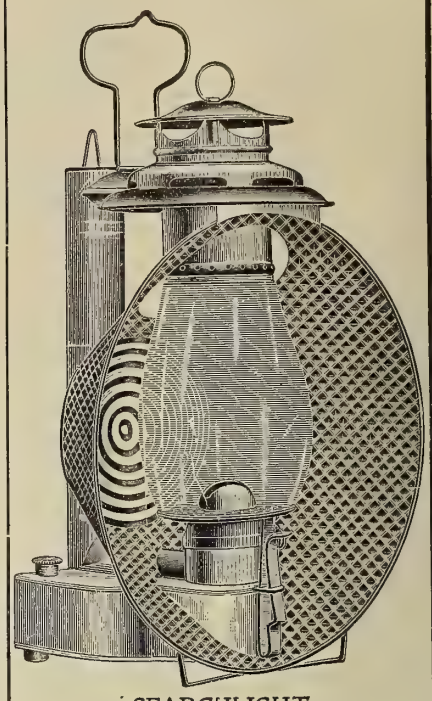
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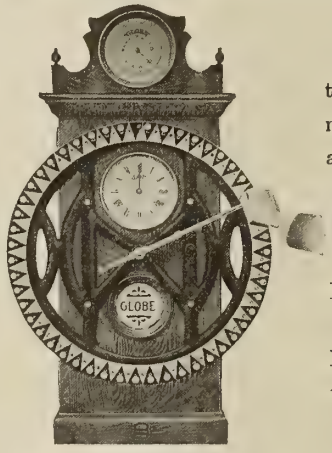
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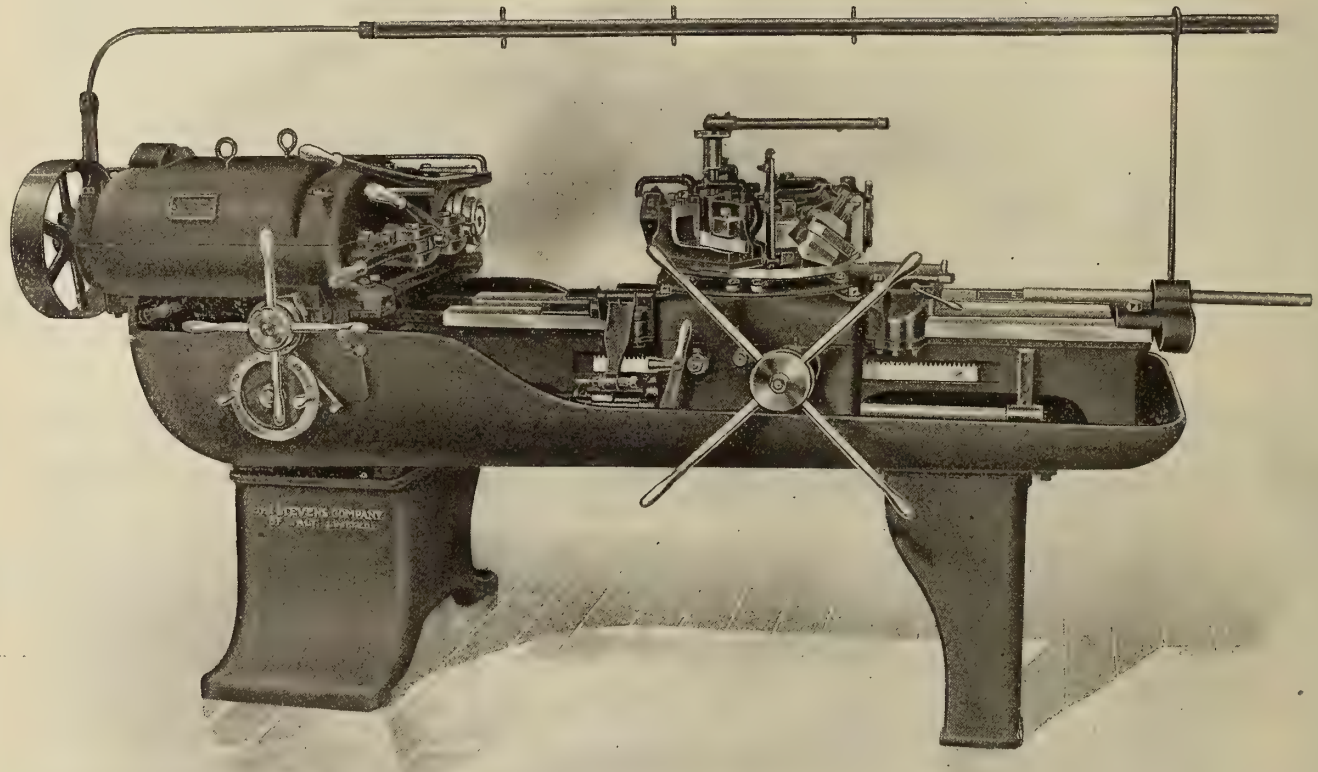
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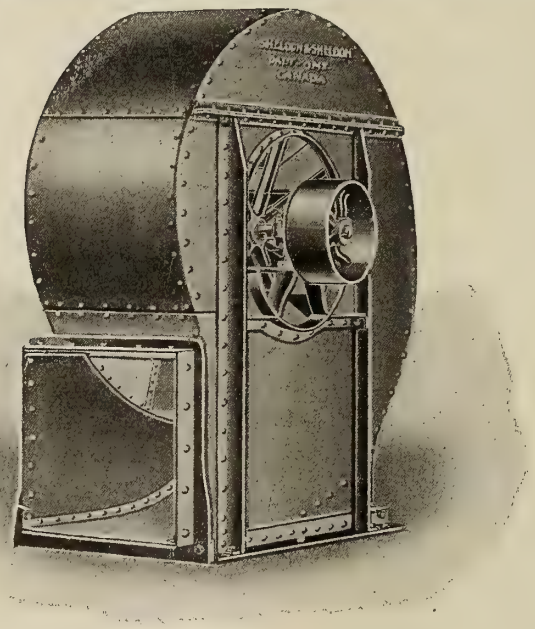
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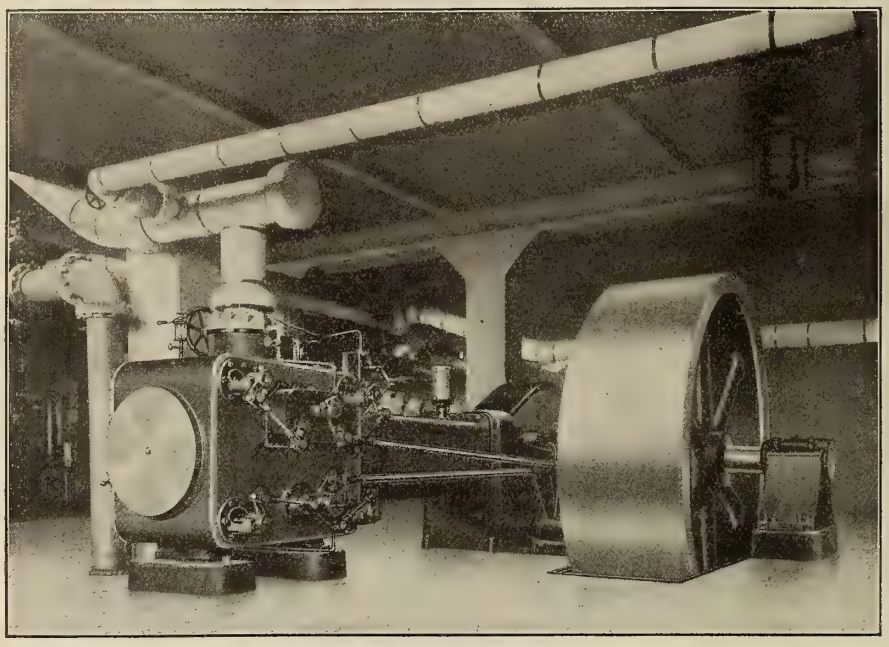
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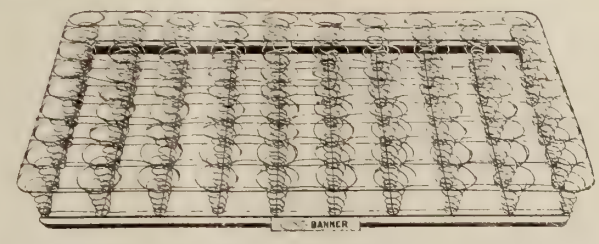
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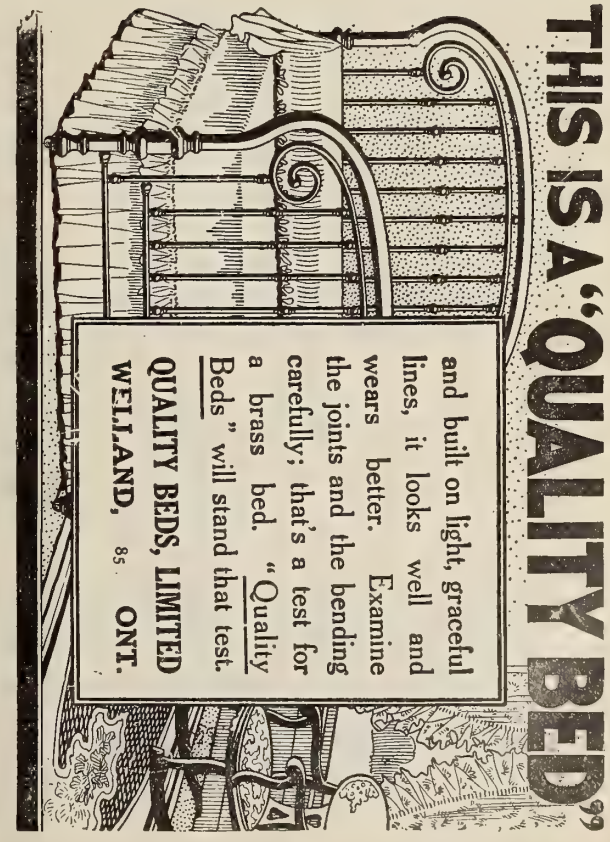
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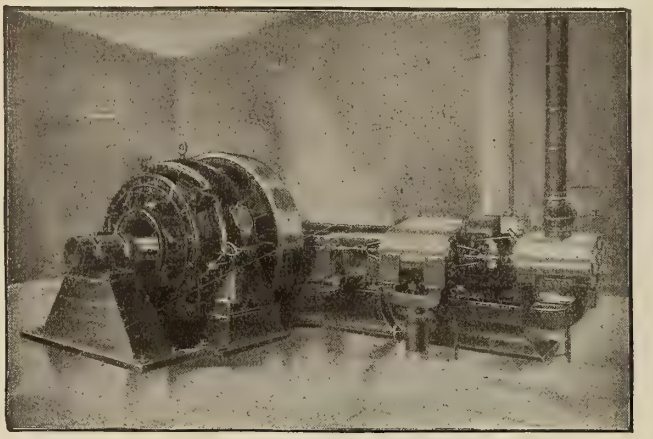
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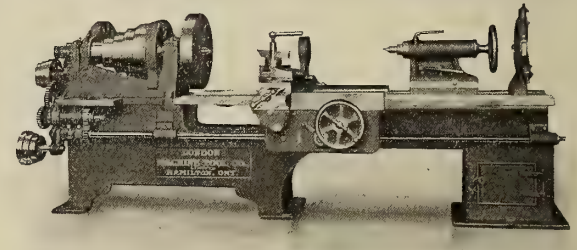
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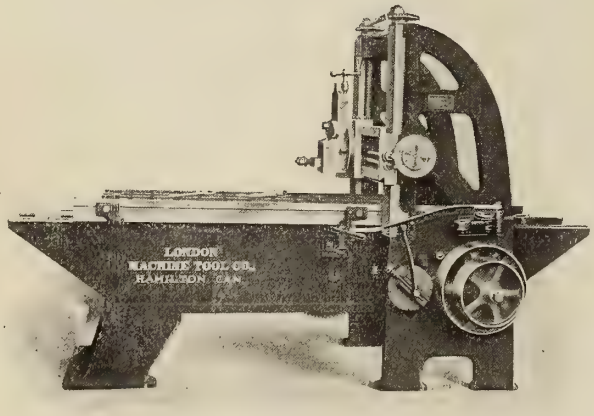
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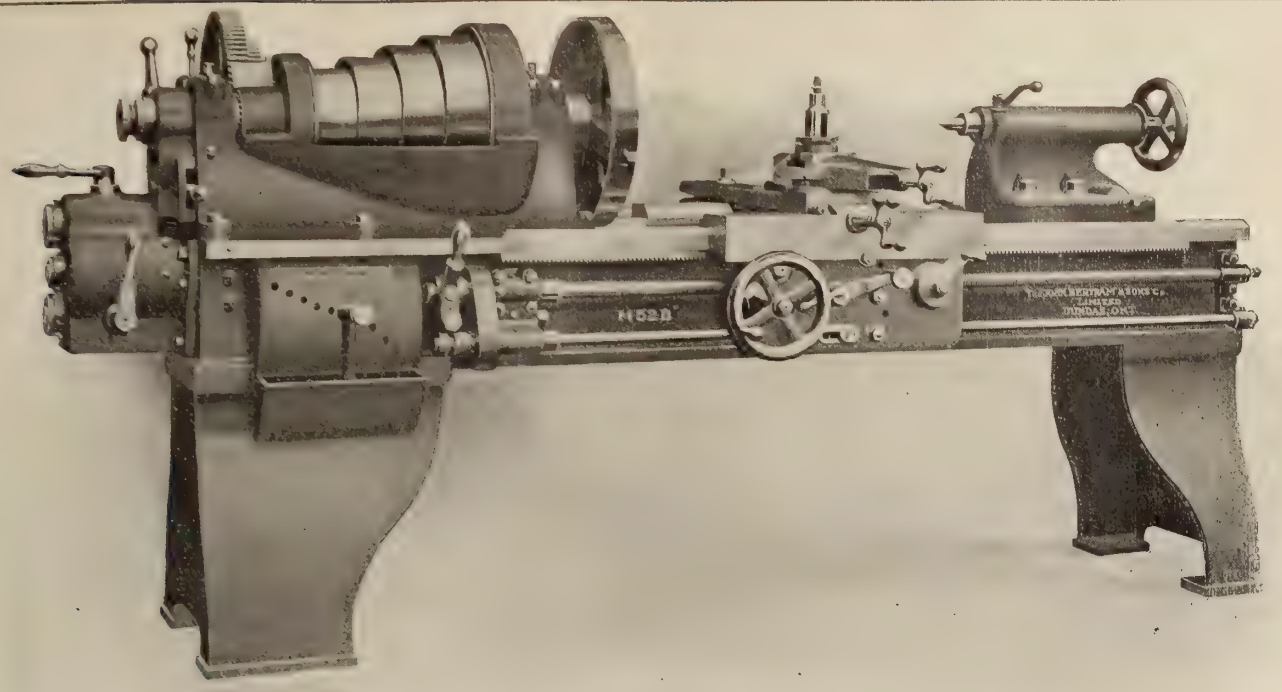
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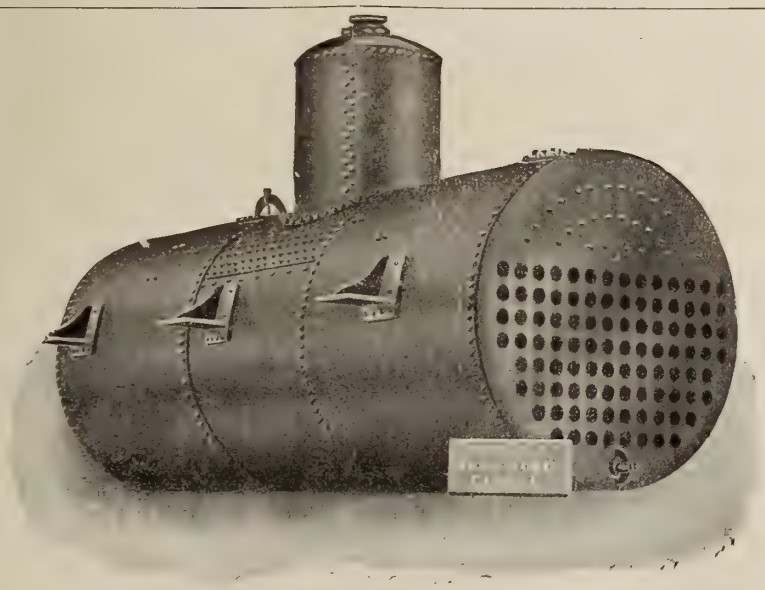
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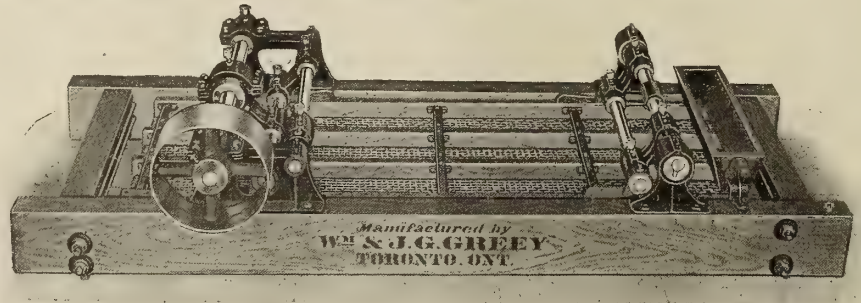
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Vol. VIII. TORONTO, MARCH, 1908 No. 8

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

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THE EDITORIAL VIEWPOINT.

Are we Buying Second-hand Machinery?

Sir William Van Horne, Chairman of the C.P.R., on his return from Cuba last month, was interviewed by a Montreal newspaper, and during his talk he touched upon several subjects of interest to Canadian manufacturers. While he expressed admiration of the way in which Canadians had invaded Mexico, the West Indies and portions of South America for the purpose of carrying on public utilities, and while he admitted that at home Canadians had shown no lack of enterprise in promoting the development of their own country, still he felt that the Canadian manufacturer had, to some extent, started on too small a scale. Moreover, instead of putting in the best plants, they had, in more than one instance, bought machinery which the Americans had discarded. This resulted in the Americans, in spite of the tariff, being able, in many instances, to undersell the Canadian manufacturer. A statement of this kind coming from a person in such a high position as Sir William, is worthy of more than a passing notice. It calls for serious consideration on the part of our manufacturers, and if they find that the statement is well founded, they should strive to overcome this weakness. The tariff is not intended to perpetuate obsolete methods and out-of-date machinery in our manufacturing establishments. On the contrary, the tariff should be used as a means of making our factories the most thoroughly modern to be found anywhere. If it is true that some of our manufacturers are purchasing the discarded machinery of the American factories, and using it to start up business in this country under the protection of the tariff, there is cause of complaint. If the protection afforded by our tariff is to be used for the purpose of turning United States junk into Canadian manufacturing plants, there is need of some action to effect an improvement. Sir William says that this is the case in many instances, and Sir William speaks with an authority that cannot be overlooked. The transplanting of second-hand factory plants into Canada is an injustice both to the country and to the manufacturers who are making an honest endeavor to build up the industries of the Dominion on a lasting basis.

Sir William and the Tariff.

Sir William has some strong views on the tariff. He very truly remarked that tariff fluctuations were a serious handicap to manufacturing interests, inasmuch as they created an uncertainty that prevented the investment of needed capital, and nipped in the bud many promising enterprises. His idea of a tariff is a graduated one, starting at 35 per cent. and being gradually reduced till at the end of five years it would be continued on a 10 per cent. basis. A manufacturer should have such security that he would be able to look and plan ahead for twenty years. He would thus know what he had to meet. It would take him two years to start, in the next three years he should have his trade well in hand, and if then, on a 10 per cent. basis he could not make good, it might be assumed that his particular line of manufacturing could not be made indigenous to the country, and would have to perish. This sounds not too bad in theory, but it is a long way out in practice. A 10 per cent. tariff in many lines would be no protection at all. As a matter of fact, when conditions, entirely overlooked by Sir William, are taken into consideration, a 35 per cent. tariff even does not give a 10 per cent. protection. For instance, he overlooks the fact that Canada is still in its infancy, and that markets here are comparatively limited. Consequently the Canadian manufacturer cannot do things on so large a scale as those with a home market twelve or fifteen times as large. The saving in cost of production on the larger scale is more than 10 per cent., and Canadian industries would be put out of business if they had to compete on these terms. The United States, with its home market of eighty millions of people, has never dreamed of getting down to such a basis. On the contrary, they keep up a practically prohibitive tariff on every line in which they

fear competition. If Sir William's ideas were carried out not only would promising enterprises be nipped in the bud, but those already grown and bearing fruit would wither and die. The United States has become the great manufacturing country it is to-day by keeping its market for its own people, and Canada to become successful as a manufacturing country must be kept for the Canadians. In fixing the freight and passenger tariffs of his railway systems, Sir William does not start them down a toboggan chute of the kind he suggests as suitable for the Canadian Customs.

The All-Red Route.

Sir William also gave his views on the All-Red Route, but while on this topic he was not nearly so indifferent to the perishing of an enterprise that might not make good under unfair conditions. This is how he held forth: "After what the C.P.R. has done, without aid of any kind, in establishing and maintaining the Pacific trade, which is now so great as to demand further accommodation; after putting a fleet on the Atlantic, which comprises the *Empresses*, and creating a business which will need the building of larger and faster boats, I say it would be a shame to set up or try to set up what is called the All-Red Route." This sounds somewhat different. Sir William is not prepared to go up against a killing competition himself, but would view with indifference the perishing of Canadian manufacturers. Remove the tariff protection of the Canadian manufacturer and leave the monopoly of the Atlantic and the Pacific carrying trade to Sir William, that he may pour the products of the cheap labor of Europe and of the Orient into Canada, and you will be establishing conditions that to his mind are ideal. At any rate, that is the impression one gets from his interview. "Get the tariff down to a 10 per cent. basis and kill off the industries of the country," he says in effect, "but do not do anything so shameful as to build a steamship line to compete with our boats." It is not surprising to find a high Canadian railway official showing such indifference to the manufacturing interests of this country. They have become so accustomed to overlooking the Canadian manufacturer that his interests do not figure in their calculations. As a matter of fact, however, the Canadian manufacturer is, and always will be, the Canadian railway's best customer, and it would be wisdom on their part to aid him in every way possible. Sir William takes occasion to point out that the C.P.R. steamship lines were established without "aid of any kind." Does this mean that we should be grateful to the C.P.R. for not demanding fishing rights along our coasts as they got free lands along the line of their railway?

A Brilliant Idea.

The Toronto *Globe* has given birth to a brilliant idea, one of the most remarkable ideas of modern times. Some of the world's greatest men, in all ages, have tried to find a solution for the ever recurring problem of bad times, but not until the *Globe* hit upon it has any of earth's great ones been able to find a remedy. It sets out by announcing that the Canadian manufacturers are, through the protective tariff system, the recipients of a monetary consideration, and it continues: "Under these circumstances it is clearly incumbent on the beneficiaries of the system to depart from the lines of greatest profit sufficiently to relieve a passing time of distress. If this would be likely to result in serious losses, it would be an unreasonable demand. But the fact that large forces of men were until recently wanted in the leading industrial establishments of the province shows that no serious loss would result from giving them employment at the present time. The passing stock market flurry is but momentary. Permanent demands of a few months ago have not vanished. It is only a matter of continuing operations and accumulating stocks till times resume their normal condition. Some effort should be made in this direction by those for whose benefit the Dominion is carrying a costly fiscal inheritance." It is strange that this solution of the difficulty was never thought of before. It is the essence of simplicity. All that has to be done is to keep the factories running and the men at work, and no one will feel the pinch. Of course the mere matter of getting cash to pay salaries is unworthy of consideration. All that is necessary in this connection, according to the *Globe's* idea, is for the manufacturers to become their own customers, paying the cost price of the product of their own factories out of their own pockets and piling the goods up till such time as the people want them. It is surely the simplest thing in the world, and we need never again have hard times. Some foolish people have been telling us that the manufacturing and storing up of goods for which there was no demand brought about bad times by what they called over-production. The *Globe*, however, wiser than they, has made the discovery that over-production is the cure for and not the cause of hard times. The *Globe* is either a great discoverer or a great humorist. The wise manufacturer will take the latter view, and laugh at its joke.

The New Zealand Preference.

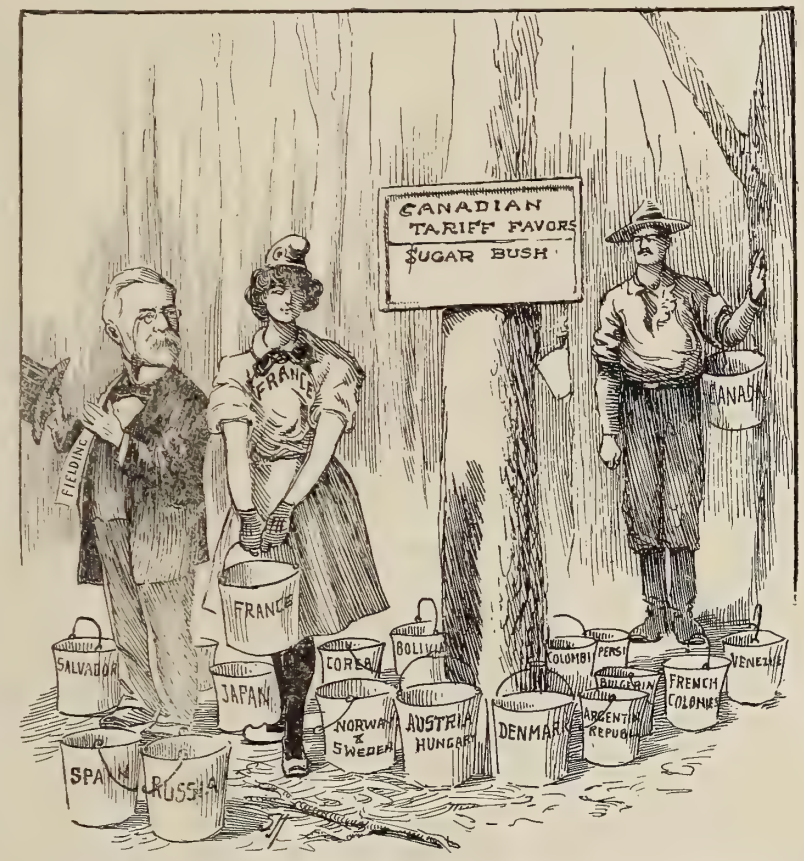
In the January issue of INDUSTRIAL CANADA our New Zealand correspondent warned Canadian manufacturers against attempting to grab for themselves all of the difference between the preferential and the regular tariff of that country. Our correspondent complains that the Canadian manufacturer, instead of underselling his competitors, who do not enjoy the benefits of the preferential tariff, keeps on raising the Canadian price until all of the difference passes into his own pocket, and the New Zealand consumer gets none of the advantage whatever. He instances the action taken with regard to a certain line of wearing apparel, used mostly by the laboring classes, which enjoyed a preference of 20 per cent. The Canadian price of the line went up gradually till the whole of the 20 per cent. was going into the pockets of the Canadian manufacturer. The facts in this particular case were brought to the attention of the New Zealand Minister of Customs, with the result that the preference was promptly cancelled, and the business is now going back to the United States. While action has so far been taken in this one line only, our correspondent intimates that there are several others which will share the same fate if we in Canada do not mend our ways, the Minister having made up his mind that the preference shall not be paid by the New Zealand consumer. That the Minister is in the right there is no room for argument. The preference was given to Canada with the idea of keeping the foreign manufacturer out, and not for the purpose of increasing the profits of the Canadian. The preferential tariff enjoyed by Canada means a considerable loss of revenue to the New Zealand treasury, and the very least the Government can ask is that the loss in revenue it suffers shall be the gain of its own people. Canadian manufacturers seeking trade in that sister colony should bear this in mind, and do their best to show that they appreciate the advantages extended to them. If once the preferential duty is removed, it will never be put on again, our correspondent says, and the sooner our manufacturers come to realize this the better for themselves. Moreover, the Canadian manufacturer should not lose sight of the fact that the use he makes of the preferential tariff is being closely watched by the agents of foreign firms, who promptly report his shortcomings to the Minister of Customs, with a view to having the preference removed. With these jealous rivals ever on the watch to trap him, the Canadian cannot be too careful in his

treatment of the New Zealand consumer. Aside altogether from any fear of what foreign trade rivals might or might not do, it is the part of wisdom for the Canadian manufacturer to show that he appreciates the friendly spirit of New Zealand by giving the people of that country the best he has to offer, both in the matter of price and of quality. Under the preferential tariff we have exceptional opportunities for building up a profitable trade with New Zealand, and it would be a pity indeed to see them destroyed by an excessive greed for gain on our part. Surely we can make a reasonable profit without taking from the people the money which their government intended to give them through the medium of the preferential tariff.

What the Labor Unions Want.

The annual deputation representing Canadian organized labor, through the Dominion Trades and Labor Congress, waited on Sir Wilfrid Laurier and Hon. Rodolphe Lemieux recently, and placed before them a number of requests for legislation affecting labor. Amongst these were the following: Increased pay to letter carriers; inspection of the running gear of vessels to prevent accidents to longshoremen; an eight hour day on Government works; a commission on technical education; reservation of public lands for bona fide settlers; passing of the bill authorizing co-operative societies and extending the principle to banking; old age pensions; prevention of importation of strike breakers during negotiations under Lemieux Act; abolition of immigration bonuses, and exclusion of Hindu labor; respecting the Japanese question the delegation expressed its willingness to await the practical result of the Lemieux mission; a department of labor with a separate minister; regulation of hours of telephone employees. This makes a pretty long list, and would keep Parliament busy for some time if it were undertaken, but the chances are that the most of it will go on the shelf. Sir Wilfrid said that if a re-arrangement of the departments became necessary there should be a separate department of labor. Regarding old age pensions he said that while he was open to conviction he had not yet been convinced of their necessity. Mr. Lemieux told them that eventually the Railway Commission would regulate telephone matters, that the letter carriers would get an increase, that the question of co-operative banks was a serious one, that the Japanese question was settled for all time, and that the Hindus were practically to be kept out, and the deputation bowed itself out. If, instead of going up with a whole string of demands, these gentlemen concentrated their energy on some one worthy object, they would be doing something in the interests of the people they profess to represent. For instance, they ask for a commission on technical education. If, instead of mixing this up with a lot of other impossible demands, they concentrated their energies on it alone, they would have the support of the manufacturers and employers, and their united action would be sure to produce the desired result.

A SURPRISE.



JACK CANUCK:—When Mr. Fielding invited her to the sugaring off, I wonder if he knew she intended filling all her friends' pails as well.

The Agitator in New Zealand.

There is no spot on all the earth where organized labor holds such sway as in New Zealand. There its ideas have been tried out on a larger scale than anywhere else, and its power is well-nigh supreme. New Zealand has stood for all manner of labor legislation, but there is one product of unionism that it is beginning to find so great a detriment that it proposes to legislate against it. The professional agitator has become such a menace to New Zealand that the Government proposes to pass a law making his calling illegal. A new bill amending the Industrial Conciliation and Arbitration Act was introduced at the present session, but our New Zea- death blow at these parasites. The bill has been held over till the next session, but one New Zealand correspondent in his letter this month assures us that it will then be pressed to an issue. Clause 53 (1) reads:

"No person shall be qualified to be a member of the Committee of Management of any industrial union or industrial association, or an officer of any such union or association, unless he has been or is actually and bona fide engaged or employed in the industry in respect of which such union or association is established."

A penalty of ten pounds is provided for any offence under this clause. If this clause becomes operative the agitators who go about the country forming unions and using them for their own purposes will be effectually disposed of. The vast majority of labor troubles that occur in this country, as well as in New Zealand, are caused by these parasites, who would be out of employment if peace reigned between the employer and the employee. We have the labor agitator with us in Canada, too, and what makes him even more obnoxious here is the fact that he is usually an importation from another country, who comes for the express purpose of making trouble and departs as soon as the trouble is over. An Act somewhat after the one New Zealand proposes to pass is badly needed in Canada, not alone for the peace of the industrial field, but also for the protection of our workingmen, who are frequently misled by those foreign demagogues, whose sole aim is to get

an easy living for themselves out of the honest, hard working members of the union. Our correspondent tells how they do the trick in New Zealand, but they have methods in this country that are fully as profitable to themselves. It is to be hoped that these labor men who are fond of quoting the enlightened labor legislation of New Zealand will take note of this Act and recommend it to the Canadian Parliament.

President Roosevelt's Message.

Canada has reason to be thankful that it has not a president—like Mr. Roosevelt. The United States have found him a heavy load to carry, and the men who have invested their all in the industries of that country have every reason to wish him out of office, and out of the way of writing inflammatory messages to Congress. One of the greatest weaknesses of a republican form of government is the opportunity it affords demagogues to obtain such great power that they become a real danger. The special message which President Roosevelt sent to Congress at the end of January is a bitter attack on all corporate interests in the United States, and cannot be looked upon as anything but a bold bid for the favor of the masses, whose votes he or his party will be in need of during the next few months. In Canada we have a certain class of politicians who make a bid for the votes of the masses by attacking the men who are building up our industries and developing our resources, but these attacks are made in their capacity as individuals seeking office. If our Governor-General in his Speech from the Throne made a bitter attack on our corporations, denouncing them as despoilers of the people, and criminals under the law, we would have a parallel for the President's message. A week or so after we would have a new Governor-General. In this country, when corporations violate the laws of the land they are proceeded against in a regular and dignified manner, and their punishment is sure and adequate to meet the demands of justice. No one would tolerate our Governor-General proclaiming our corporations, however bad they might be, criminals before they were tried. That is what President Roosevelt has done, and he has done it to the detriment of the whole country, for his inflammatory message has raised the masses against capital, regardless of whether it is honestly or dishonestly employed. Chancellor Day, of Syracuse University, says that much of the message reads like the "ravings of a disordered mind," and in this he pretty nearly describes the impression which it makes on a well-ordered mind. The conclusion to be drawn from the President's message is that the administration in his hands is so weak that it cannot deal with criminal corporations in a regular and judicial manner. He calls them law-breakers, and sensible people naturally ask why they are not taken before the courts and punished. There is no need to go to Congress with a ranting message asking authority to proceed against them. If they are law-breakers the laws must already be there, and the courts have authority to enforce them. The whole thing is a bid for votes, and it is a pity that so much ruin can be caused by the ambition of a politician to win popularity with the masses. It is to be hoped that Canada will never be placed in such a position that it will be possible for a ranting politician to send forth a tirade of this kind. Some Canadian newspapers have gone out of their way to comment favorably upon the President's message, which indicates that we have the material amongst us to produce a following for a presidential demagogue if we had one.

A Good Suggestion.

Mr. Fred C. Salter, the European Traffic Manager of the Grand Trunk System, is at present in Canada conferring with the officials of his company. In four years' time, Mr. Salter says, a great change has taken place in the public mind of Europe concerning Canada. Canada is now fairly well known in all European states, and it is far easier to work up trade. He finds, however, a regrettable indifference amongst the British Consuls regarding Canada and Canadian trade interests. He suggests that Canadians should be attached to the several consulates, in order that the interests of this country may be properly represented. The suggestion is a good one. It is a serious handicap for Canada to be left without representation, or represented in an indifferent manner by a consul who never saw the country and does not care anything about it. At this period in our development what we need above all things else is enthusiasm, and we cannot expect an Englishman, who is not naturally enthusiastic about anything, to become so for our special benefit. Mr. Salter's suggestion is one that deserves consideration.

The Georgian Bay Canal.

The Georgian Bay Canal, that is, the one which proposes to make use of the French and the Ottawa Rivers, was recently discussed in Parliament. For more than half a century this project has been discussed periodically in Parliament, but all that has so far resulted from the discussion is a survey of the route made at a cost of about half a million dollars. The cost of the work would, it is estimated, be about $80,000,000. Its advantages are a shortening of distance of nearly a thousand miles, a saving of time in making a round trip of nine days, and a very large saving in transportation charges. In addition it is claimed that the construction of the canal would open up vast forests of pulp-wood, and develop many thousands of horsepower that are now going to waste. The Government has not yet made any pronouncement of policy on the question, but some day some government will take the matter up in earnest and the canal will be built. Of water transportation it is scarcely possible for us to have too much. It means cheap rates for the moving of the productions of the farm, the factory, the forest and the mine, an advantage which is so widely distributed that everyone feels the benefit of it.

The Year's Immigrants.

The total immigrants into Canada last year was 277,376, as compared with 215,825 in 1906, an increase of 61,464. Of these 220,825 arrived at ocean ports, an increase of 68,695, and 56,551 came from the United States, a decrease of 7,231. Mr. J. Bruce Walker, who has been in charge of the Canadian Government immigration offices in London, and is now in Canada, expresses the opinion that 1908 will be the banner year from the point of view of the class of settlers coming into the country. He thinks there will be very few new arrivals who will need the support of the Government or of charitable organizations. This is encouraging, for in the past we have had too many arrivals who proved more of a charge than a benefit to the country. The people gathered in by the charitable organizations are usually of the unemployed class, which is made up largely of people who do not want employment. They will not work in the country of their origin, and they do not want to work when they come here. They seem to get the idea somewhere that Canada is a country in which people live well without working, and when they arrive they are insulted if anyone offers them employment. It is a satisfaction to know that this class is becoming enlightened on the subject and is keeping out of the country. Canada is no place for a man who wants to live without working.

Looking After the Farmers.

The Government has made a large appropriation for the purpose of supplying the farmers, whose crops were either injured or destroyed, with seed grain. There has been some

criticism of the Government's action in the matter, but it can stand any criticism that its opponents feel inclined to make. The circumstances fully justify the expenditure. The farmer has to be looked after, and he certainly cannot accomplish much if he is without seed for his land. Some one has said that it is a poor advertisement for Canada, but how much worse would the advertisement be if our farmers were not able to get their crops in for want of seed? If the Government never does anything worse than coming to the rescue of the farmer in a time of need, it will have no occasion to fear its critics.

Work vs. Preference.

Sir William Van Horne recently remarked, "An ounce of work is worth a ton of preference," and he is one of our shrewdest commercial critics. It is very true that the greatest preference ever conceived will not of itself build up a trade. It takes work, and good, hard, conscientious work, to introduce any product on a new market. As Sir William remarks, an ounce of work is worth a whole ton of preference. A striking illustration of the relative values of work and preference in building up trade is to be found in the volume of business done in Canada by English and United States firms. Canada gives England a preference of 33⅓ per cent. in this market, and the Englishman wonders why trade does not pour into him in consequence. The United States manufacturer pays the full duty and goes on increasing the volume of the business he does with us. The Englishman cannot understand this, and complains that the preference is no great thing after all. The explanation is simple. The American works, the Englishman does not. The American comes after the trade, and spends large sums of money advertising his products in Canada. The Canadian knows what the American has for sale, and the reason why he should purchase it. Of English products he knows nothing, for he has not been told anything. If the Englishman worked as the American works he would soon find that the preference counted. Until he wakes up to the importance of work the preference will do him little good, and the American will continue to find in Canada his best customer.

An Object Lesson.

The day is perhaps not far distant when Canadian manufacturers will be enjoying a preference in the British market. Tariff reform is making headway in England. The English people are beginning to question the wisdom of clinging to their policy of free trade, while all the rest of the world maintains a protective tariff wall. Should the time come when Great Britain sees the wisdom of adopting a policy of protection, it is to be expected that Canada and the other colonies will get a preference over foreign countries. This is the policy which the Rt. Hon. Joseph Chamberlain has been fighting for, and it looks at present as if his campaign would bear fruit in the near future. When that day comes the object lesson which the United States is giving us in our own market should prove of value to our manufacturers in exploiting the British market. It should be useful in impressing on them that a preference without work is dead. Already we hear people talking of what a great boom it will give Canada to have a preference in the British market, just as the British manufacturer and merchant thought the Canadian preference was going to boom their trade in this country. They have been sadly disappointed, just as our own manufacturers would be if, like the Englishman, they failed to back the preference up by solid work and good advertising. The Englishman has great opportunities in Canada, but his lack of energy renders them valueless to him, while the American, by his push and enterprise, wins success despite the handicap he has to overcome. If the Canadian ever gets the advantage on the British market that the Englishman has here, and goes after British trade the way the American goes after Canadian, the combination will carry him to the highest rung of success. If, on the other hand, like the Englishman, he thinks the preference sufficient of itself, he will meet with a sad disappointment.

Work for the Commission.

When the proposition was made that the Government appoint a Permanent Tariff Commission, with power to go into and report on tariff matters, and see to the proper enforcement of the customs laws of the country, certain newspapers set up the cry that an attempt was being made to get the tariff out of the control of Parliament and into the hands of a commission that could be "worked" in some mysterious way. What work was there for a tariff commission to do that the Minister of Customs could not do under existing conditions? was asked. That there is plenty of work for such a commission that the Minister does not and cannot do is well known to everyone who has dealings with the Customs Department. Take, for instance, the matter of fines imposed for undervaluation. Fines are imposed and fines are remitted, but as to the why and the wherefore, both of the imposing and the remitting of them, everyone is left completely in the dark. The whole thing is a matter of private arrangement, and the opportunity for the Government to do its friends a good turn is too great to be overlooked. The strength of the culprit's pull has a lot to do with the size of the fine he has to pay, or the amount remitted of a fine he has been condemned to pay. This jugglery is possible because it is all done in the dark. No return is published showing the size of the fine or the final disposition made of a case. Were there a Permanent Tariff Commission empowered to deal with cases of this kind, there would be no chance for favoritism. Every case would be dealt with on its merits. It would be tried in an open court and a proper record kept, so that all would be treated alike and favoritism shown to none. This is only one of the many benefits that would result from taking the administration of the tariff out of the control of the politicians. The remitting of fines imposed for undervaluation is an altogether too common occurrence under existing conditions, and it will continue to be, so long as the thing can be done as a matter of private arrangement between the Minister of Customs and the offender. If the latter is a friend of the Government, or a friend of friends of the Government, his chances are good of getting out of the difficulty at little or no cost. The remedy lies in the establishment of a Permanent Tariff Commission.

A Suggestion on Financing.

A correspondent draws attention to the great need there is of more capital at a reasonable price in this country, and he suggests a method of obtaining it. He points out that the various loan companies have not sufficient money to meet the requirements of this country, and owing to this shortage they have advanced the rate of interest to a point where it has become unprofitable to borrow. This has resulted in the restriction of trade, and he instances particularly the building trade, which is carried on almost entirely on borrowed capital. With money at 6½ and 7 per cent., building is restricted, and this reacts on a great number of different factories, the products of which are utilized in the construction of buildings. There is a ready sale for houses with mortgages at 5 and 5½ per cent.; but with money at 6½ and 7 per cent. the demand disappears, and building ceases, throwing a host of men out of employment. To remedy this state of affairs he suggests that a delegate be sent to the Old Country by the Manufacturers' Association to demonstrate to the loan companies there that there is a very profitable field in this

country for the loaning of money with absolute security. He thinks that if this were done it might be possible to induce some of them to open offices in some of the principal cities, with men in charge capable of passing on loans and doing business by the same methods as our local companies. The undertaking on the part of the Manufacturers' Association would, as he admits, be an unusual one, but if it could be carried to a successful issue it would be well worth the effort. There is no disputing the fact that this country needs more capital, and any method by which it can be secured at a reasonable cost is worthy of consideration. There is any amount of money in the Old Country earning only 2 to 2½ per cent. that could be safely invested here at twice that rate and would prove a great benefit to the country. To convince its owners of this fact is, however, quite another matter, but perhaps not an impossible undertaking.

The Visit of Mr. Bryce.

The visit to Canada of Mr. Bryce, the British Ambassador at Washington, has been made the subject of a great deal of newspaper surmise and comment. From Washington came the information that the object of his visit was to confer with Sir Wilfrid Laurier and other prominent Canadian officials respecting various questions pending between Canada and the United States. It is encouraging to have this recognition from the British representative at Washington, and it is certainly a very striking departure from the method adopted by British Ambassadors in the past in settling Canadian questions at Washington. It is not so very long ago that it was considered quite the proper thing to give the United States everything they asked or claimed from Canada without taking the trouble to ask what we had to say about it. But Canada has grown into quite a big boy now, and has intimated that in future there is a new force to be reckoned with. That Mr. Bryce recognizes this and means to take advice at headquarters before venturing to conclude any settlement of Canadian-United States disputes, shows that he has the right idea. If any more blunders are made in dealing with questions between Canada and the United States, Canadians will know that the fault lies at home, or that the British Ambassador has deliberately turned down the advice of the Canadian Ministers.

The Niagara Power

One of the questions outstanding at the present time between Canada and the United States, and one on which we are told Mr. Bryce sought the advice of the Canadian Ministers, is the distribution of power from Niagara Falls. The Americans want all further development of power at the Falls stopped, which means that Canada is not to utilize this vast store of energy which, in Ontario, takes the place of coal in the development of her manufacturing industries. So far as the United States is concerned they have already developed all the power it is possible for them to get out of their share of the Falls. In addition to this, 50 per cent. of the power already developed on the Canadian side can be sold in the United States, so that, if development were suspended now, the Canadian manufacturer would have available only a very small percentage of the power to which he is entitled. Furthermore, the price of power on the Canadian side would be regulated by the price on the American, where, owing to the much smaller quantity available, the price is naturally much higher than it should be on our side of the line. The proposal coming from the United States to suspend further development now that they have got all they can get out of their share of the Falls, is very American, but it is not likely to meet with favor in this country, and certainly any treaty with that end in view should be strenuously opposed by the Canadian Government. We have no coal in Ontario, and our waterpowers, chief amongst which is Niagara, must make up to us for this disadvantage. Not only must we get every bit of power possible out of Niagara, but all of it should be kept in Canada and distributed to manufacturing cities and towns of Ontario. The preservation of the scenic beauty of Niagara Falls is all very well from a sentimental point of view, but it is asking too much to expect Canada to stand the whole cost of maintaining the show. We need the power for the development of our industries, and if the scenery suffers in the development of it, it is an unfortunate circumstance that can not be helped. On this subject Mr. Bryce should be left in no doubt as to where Canada stands, and no treaty that can in any way interfere with the fullest development of power on the Canadian side of the Falls should be entertained.

Reciprocal Mine Owning Rights.

Another subject which Mr. Bryce was said to have listed for discussion with the Canadian authorities was the question of reciprocal mine owning rights. According to the laws of the United States an alien could not stake and record a claim in that country. All mines were reserved for the benefit of citizens of the United States, that is, the original grants of them, and the law was a good one. No one could quarrel with the American Government for preserving the country's natural wealth for the benefit of its own citizens, or those who declared their intention of becoming citizens. It was an excellent law, and went a long way towards making the United States the wealthy country it is to-day. In the days when there was practically no mining in this country, a Canadian could not go to the United States and locate a claim for himself. If he had the price he might buy one from some American, but he had absolutely no rights as a prospector, unless he became a citizen of the United States. In those days there was no talk of reciprocal mine owning rights, but now that it has been demonstrated that Canada is a rich mineral country, Mr. American is showing great anxiety to get in here on an even footing with the Canadian. He wants reciprocity in mining, now that all the best of his own are gone, and Canada's development in that direction is only just beginning. It would be a shame for Canada to take advantage of this striking example of American generosity. Mr. Bryce should be instructed to convey our thanks for the offer back to Washington, and intimate to our friends down there that the mineral wealth of this country is the birthright of the Canadian people, and that the Government that took any part of it from them would be guilty of a criminal offence.

The Taxation of Companies.

A company which takes out a Dominion charter is relieved of a great many special taxes which are now imposed by various provinces. Hon. Mr. Scott, the Secretary of State, has given it as his opinion that if the matter were taken to the courts the taxing of companies with federal charters on the same basis as those with only provincial charters, would be held to be unconstitutional. The difference in cost between Provincial and Dominion charters is not so great that firms desiring to do a national business should hesitate about taking them out. It is true a Dominion charter can not be obtained for a company until it is really a company. It is necessary to have 50 per cent. of the proposed capital subscribed and 10 per cent. paid up before a Dominion charter can be obtained. Companies in existence and doing business should have no difficulty in meeting this requirement, and since the rendering of the above judgment it would seem to be necessary for all companies doing a national business to take out federal charters.

D. M. Coughlin.

The Ottawa Branch of the Royal Mint

The Place Where the Money is Made

THE people of Canada have been so busy making money in a figurative sense that they have had little time up to the present to inquire where or how our coins were literally made. The establishment of a mint at Ottawa, as a branch of the Royal Mint in England, has aroused a curiosity about the methods of coinage, which becomes personal as we apprehend that we have in our midst the plant which turns out the shiny half dollars and the lesser units which make up our currency. It appears, too, that there is a profit to the country from the coinage of metals which will bring in a revenue increasing as the demand for coins increases. So that what was at first approved of largely from a sentimental standpoint, will be recognized as a sound business proposition.

The following description of the work is summarized from an address given by Mr. A. H. W. Cleave, Superintendent of the Mint, before the Canadian Institute at Toronto. To Mr. Cleave also we are indebted for the photographs from which the cuts illustrating the article were made.

For the present it is not intended to coin gold. Silver and copper pieces shall be turned out exclusively, and the plant is ample to supply the Canadian demand.



1. Melting Ovens 2. The Strong-room 3. Metal Rolling Machinery. 4. Coin Presses.

Native Metals Used.

All the metals used for coinage (with the exception of the tin used in bronze coins) can be obtained in Canada. The silver which has already been purchased by the Mint was obtained from Trail, B.C., where an electrolytic refinery for silver has been established. There is not at present in Canada

an electrolytic refinery for the treatment of copper, and this metal is therefore shipped to the United States, where it is refined, and then shipped back again to Canada. It is anticipated, however, that this arrangement will soon be altered, as there is a large and growing demand for copper in Canada; but unless this metal is so treated that most of the impurities are removed, it is very difficult to manipulate.

All the metals used for coinage purposes will be of a purity of 999 parts per 1,000, or over.

The demand for silver and bronze coin for use in the Dominion shows a marked increase since the passing of the British North America Act. For the ten years commencing 1870 the average annual demand was 284,000 dollars' worth. For the seven years commencing 1900 the average annual demand was 502,428 dollars' worth; the amount coined in England for the above service, in the single year 1906, being no less than 850,460 dollars' worth. In spite of this large increase, there is every reason to believe that the demand for these coins will continue to grow. There is a very large amount of United States silver coin in circulation throughout the Dominion, especially in the West. The manager of one of the leading Canadian banks has informed me that when, in 1906, the Government had allowed them a small commission for collecting and deporting the foreign silver, no less than 12,000 dollars' worth was collected by this bank alone, in a single day.

Foreign Silver Should be Refused.

Now that the Canadian Mint has been established, it is to be hoped that all foreign silver will be deported, and replaced by Canadian silver coins. With the co-operation of the banks and the public generally, the Mint will, after paying all running expenses, be a source of considerable revenue for the Dominion.

How large the seigniorage on silver really is may be readily seen when it is remembered that with silver at its present market value, the face value of a silver coin is about 2½ times its intrinsic value. A Canadian 50 cent piece contains nearly 166 grains of pure silver. One troy ounce, or 480 grains of pure silver, can be purchased for about 57 cents; so that the 50 cent piece contains only about 19¾ cents' worth of pure silver. The manufacture of bronze coins is even more profitable, the face value of a cent piece being about 4½ times its intrinsic value.

A very serious depreciation in the value of the early coins was caused by dishonest persons, who clipped or filed the edges of the coins, while not interfering with the designs, so that their weight was considerably reduced. To prevent this, the present device of graining or milling round the edges has been adopted. It was first introduced in 1631. On certain coins, letters are raised round the edges, in place of the milling, and this answers the same purpose. These raised letters are to be found on the British five-shilling piece and on certain foreign coins, including the new United States gold coins.

Many Departments of Work.

The Ottawa Mint is divided into six principal departments:

(1) The Mint Office, into which all bullion is received for coinage purposes, and from which the finished coins are issued to the distributing centres.

(2) The Melting House, in which the bullion is mixed, melted and made into coinage bars.

(3) The Coining Department, where the finished coins are made from the coinage bars and tested, ready for issue.

(4) The Assay Department, where the fineness and standard of the ingots, coinage bars and coins are ascertained.

(5) The Die Department, where all the coinage dies are made.

(6) The Mechanical Department, where the power is generated, renewals made, and repairs to the coinage machinery effected.

The Imperial gold coins are composed of eleven-twelfths of pure gold and one-twelfth of copper (known in the trade as 22 carat).

The Canadian silver coins are composed of thirty-seven-fortieths of pure silver and three-fortieths of copper (known in the trade as sterling silver). The bronze cents are composed of 95 per cent. of copper, 4 per cent. of tin, and 1 per cent. of zinc.

The Coining of Metal.

The various processes through which the metals pass in being transformed from the rough metal into the finished coin are as follows:

The ingots, as received from the refinery, are placed in the crucibles with the necessary amount of alloy, and charged into the melting furnaces. Starting with cold furnaces, the first charge is melted in about eighty minutes, but only about forty-five minutes are required to melt each of the subsequent charges.

When the metal is melted the crucibles are lifted from the furnaces, and the metal is poured into cast iron moulds, thus forming coinage bars. These bars are about two feet long, two inches wide, and half an inch thick. In the case of gold and silver, assay pieces are taken from the first and last bar from each crucible, and forwarded to the Assay Department, where they are tested. The bars are not passed into work until a satisfactory report has been received from that department stating that they are of the correct standard. All bars which are found to be above or below the legal standard fineness are re-melted.

The good bars then pass to the rolling mills, where they are rolled into long, thin strips (technically known as fillets). These fillets are, when finished, about seven or eight feet long and of the same thickness as the coins which will be produced from them. During the process of rolling, the enormous pressure to which they are subjected renders them hard and brittle. To overcome this brittleness they are passed through the fillet annealing furnace, which softens them again. The fillets are passed about ten times through the breaking down mill, and are then annealed. They are then passed about nine times through the thinning mill, and about six times through the finishing mill. In the case of silver and bronze this treatment is sufficiently accurate, the finishing mill being adjustable to the one five-thousandth of an inch.

The fillets are next transferred to the cutting machines, where the blanks are punched from them. Each cutting press cuts out two blanks at each stroke, and can produce three hundred blanks per minute. The skeletons of the fillets which are left after this process (technically known as "scissel") are made up into bundles and re-melted.

The blanks are then taken to the marking machine, where a protecting edge is raised round each blank. This raised edge protects the design on the coin and keeps it from being rapidly worn away when in circulation. The machine can mark six hundred blanks per minute.

The marked blanks are then softened, by passing them through a blank annealing furnace, cleaned or blanched, washed and dried.

They are then ready to receive the impression which will be given to them by the coinage dies.

For the storage of bullion the Mint is provided with three strongholds, the doors of which are fitted with double combination locks, controlled by triple time clocks. No stronghold can be opened, at any time, without the presence of at least two officers. After the day's work is completed and the metals locked up in the strongholds, the doors cannot be opened again until the clocks have run down. These clocks can be set for any time up to ninety-six hours ahead.

The Remedy for Inefficient Labor*

A Plea for Technical Education

WE must look at our problem from two points of view: There is your point of view—the point of view of the employer who knows the need of the workshop and office. There is my point of view—the point of view of the schoolmaster who should know how to train for those needs. It would not always be wise to accept without question the point of view of the man of affairs. It would always be dangerous to accept without question the point of view of the man of books. Approached from the *two* points of view the problem becomes less anxious. One view supplements the other; one view redresses the balance of error in the other.



Work of an Ontario Manual Training School.

The Point of View.

And now a word as to your point of view. Your business creed is "to make well and to sell cheap." Believe me, an altogether worthy creed! Honest doing and honest dealing! This becomes the adviser of His Majesty and the steward of the mysteries, as well as the captain of industry and the toiler at the bench!

You "make well" only as your workmen *know how* to "make well." Do they know? Can they learn? The apprenticeship system is going, or gone. It adopted, and, almost in the very bosom of the employer's family, tutored and trained the young workman. It is gone with its splendidly human sympathies before a modern cash basis which tends to deny all human relationships.

Even as the apprentice disappears, the shop itself begins to teach less and less. The kitchen loom of early days has now become the great city factory that covers acres. In that factory labor is divided and sub-divided, the all-round workman becomes a narrow specialist, the man of many parts becomes the man of one part, and in that one part he quickly attains the limit of his powers and as quickly recedes from it. In that factory, moreover, work becomes standardized, and piecemeal, the machine-tool replaces the man, the automatic in the machine replaces the rational in one thousand men, cheap labor replaces expert labor, and a great band of average workmen presses down slowly among that host of happy-go-lucky fellows to whom "sufficient unto the day is the evil thereof." In that factory, in short, the workman knows not his employer, knows not his fellow worker, knows not the thing which his hands must help to shape, whence comes its parts and what its parts form, is himself but a number.

"No admittance" is written over the door of that factory. "No admittance," not rarely, is written in spirit over its machines and its processes!

The Shop Demands Knowledge.

And while the shop teaches less, it demands more.

In the modern factory knowledge reigns supreme. Mathematics, Science, and Art, come upon not by accident but as the reasoned products of patient research, are transforming all industrial activities. Directly or indirectly they have made old trades more exact and scientific, as witness the trades of the woodworker, metalworker, textile worker, engineer. Directly or indirectly they have created new and highly-skilled trades—the trades of the art worker, chemist, electrician, and that vast army of tradesmen who minister to the comforts of our homes and our leisure hours. They lead the ambitious men up and out of the brutalizing trades. The steam crane replaces the man with the shovel. And they give rise to the insistent cry of the shop for the alert and resource-

*Address given before the Toronto Branch of the Canadian Manufacturers Association, by Dr. Wm. Pakenham.

ful man who will lead—the superintendent, inspector, manager and foreman.

Where are the Workmen to Learn?

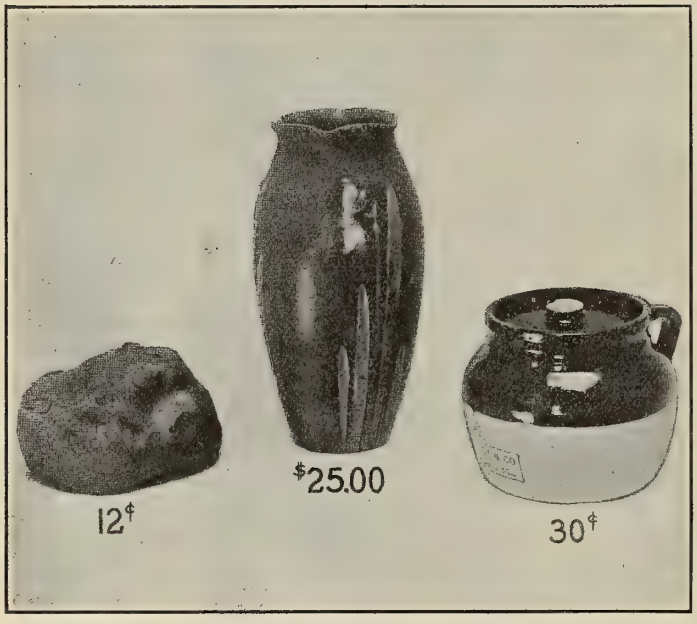
Yes, you "make well" only as your workmen know how to "make well." And where can they learn? Written large over all shop activities is the demand, "more knowledge," and again, "more knowledge." And side by side with it appears the answer, "less opportunity," and again, "less opportunity." They cannot learn in the shops.

You "sell cheap" when your employees know how to make well, and to "sell cheap." Do they know how to sell? Can they learn?

Trade to-day is not the trade of fifty or one hundred years ago. It now knows no artificial or sentimental distinction. Goods from India, Austria, England and California lie side by side upon your shelves and jostle one another upon these tables!

Space is Annihilated.

Men to-day will buy in the cheapest market and sell in the dearest. Trade has annihilated space. The Toronto of to-day



Lump of clay worth 12c. is converted into vase worth $25. This requires technical training.

is not more remote from the Liverpool of to-day than it was from the Montreal of sixty years ago. No longer has the Anglo-Saxon a monopoly in things industrial. All peoples approach a dead level, though a high level, of mechanical skill. Commerce has become a struggle, peaceful, perhaps, but none the less merciless, for the mere right to exist!

In the presence of these conditions the successful merchant of to-day must know more than how to write legibly, or to calculate interest. He must know in a minutely scientific way the commodities in which he deals, and he must know, too, the trade conditions of the world. He should understand the financial and commercial systems of his own and other countries, and he should not be unfamiliar with the problems of supply and demand, of capital and labor, and of exchange and transportation. In a peculiar sense he must know this country, its raw materials widely distributed and difficult of access, its motive power unlimited but remote, its problems of transportation greater than those ever yet faced successfully by 6,000,000 people, and its exposure to the competition of the greatest commercial nation of modern times. These things our merchant must know if he will sell well. Where can he learn? Certainly not in the office!

Just here some of you may protest. The great need of the shop and office is not expert knowledge! Perhaps you are right. Let us look at a concrete case. Here before us are lumber, nails, hammer and a workman. Out of these must come what is well made and sells cheap.

The man must drive nails quickly. He must have rapidity.

And he must drive nails persistently and with an eye single to his duty to his employer. In short, he must have character.

The man must know the nature of the wood and the nails; he must know when and where to drive the nails to give the best results; he must have the accuracy of the mathematician and the taste of the artist; he must be prepared for the new and unexpected in the material or the situation. He must then have *expert knowledge.*

Rapidity, character and expert knowledge, these are the three essentials. Rapidity must be acquired in the shop under commercial conditions. But is it so very important? Do men not differ but slightly in speed of work? And when they differ do not automatic machinery and the principles of organized labor minimize that difference? And in any case does not difference in *character* explain it? Are not character and expert knowledge, then, the two essentials? And are not these to be acquired in the main outside shop and office?

Approached, then, from the viewpoint of the employer, our problem presents a persistent demand for expert knowledge and for character, and these cannot be gained in the modern shop or office.

The Making of Citizens.

Let us now look at the problem from the schoolmaster's point of view:

Education was first given to the masses as a means of promoting intelligent citizenship. Those who opposed the gift said: "Let us not put down a ladder that the masses may come up and dispossess us." Those who favored the gift said: "Let us educate our masters that they may know how to be our masters." Both saw in public education a means of making citizens.

Now, what makes a good citizen tends to make a good workman. The good citizen is intelligent, thoughtful and provident. Even such should be the good workman. But the making of a good workman was a very subordinate object of public education. It did not aim at special callings.

Meanwhile the apprenticeship system trained for both professions and trades. The lawyer learned law in the attorney's office, the farmer learned farming on the farm, and the mechanic learned his trade in the shop.

These two systems of training, public education and the apprenticeship, worked side by side, with marked efficiency and in splendid harmony. Between them yawned no chasm. Without sudden jar or jolt, the journeyman was evolved out of the apprentice and the apprentice out of the schoolboy.

But changes came. Apprenticeship began to pass away. Divinity schools undertook the training of clergymen, schools of medicine opened their doors to prospective doctors, professional schools for lawyers, teachers and engineers followed in quick succession. And for the man in the trades? Nothing.

Public education also changed. New subjects were added—and not practical subjects at that! "Compulsory attendance brought larger and more regular attendance. Up went the age limits. Each day given up by the apprenticeship system was seized and filled by the schools with their literary subjects. At last public education stood alone—almost the one means of training boys for the trades—a means isolated and ineffective."

Decline of Manual Efficiency.

The result was manual inefficiency. And something more. Population began to shift from the country, where the boy on

the farm had much to do, to the urban centre, where he had nothing to do. "Boy life now meant receiving much and giving nothing, consuming much and producing nothing, learning much and doing nothing." Out of this life came—and comes—"a one-sided attitude towards labor, a one-sided sense of values, a false standard for measuring time, possessions, and pleasures in terms of cost, and a wholly false view of life," in short, out of it comes moral and intellectual inefficiency in the workman.

How to Meet the New Conditions.

Convinced of this, the schoolmaster set about putting his house in order. He added bookkeeping, commercial arithmetic, commercial geography, shorthand and typewriting to his school curricula, but at once enveloped those subjects in the literary atmosphere of the other subjects. The school remained as detached from the commercial world as ever. He next added drawing and design. Lost in the intricacies of time-tables made by teachers whose interests were examinations and made for teachers whose competency was doubtful, drawing and design soon lost their industrial significance and became culture subjects. Later still he added manual training and domestic science. The cultural and disciplinary values of these subjects were at once recognized and emphasized. But what about the industrial significance? I hesitate to say, even in the presence of the Inspector of Technical Instruction, that we yet recognize fully their industrial importance.

Examined from the two points of view our problem has given the same results. The employer and the schoolmaster recognize the manual, intellectual and moral inefficiency of the employee. The employer knows that the inefficiency cannot be remedied in the shop or office. The schoolmaster knows that the inefficiency cannot be remedied, or is not being remedied, in the school. Here arises the demand for an organized industrial education.

Industrial Training to the Rescue.

The demand is well-nigh universal. Italy, Germany, France, England, the United States, Japan, have recognized the demand and are meeting it.

The demand is local. Twenty thousand young men of this Province are subscribers to courses in correspondence schools. Two thousand students attend the shabbily-equipped class rooms of your Technical High School.

And the demand is pressing. Bear witness to that the hundreds of workmen whom you turn hopelessly from your doors as unskilled and incompetent. Bear witness to that, too, the thousands of industrial misfits throughout Ontario who pass aimlessly from shop to shop, the despised and rejected of the trades.



A Technical School Room in Japan.

Who Shall Assume the Responsibility?

Who must meet this demand?

Not the shops and offices, and not the existing schools. They are inadequate and ineffective, as we have seen.

Not the parents. They could not if they would. All too frequently they would not if they could.

Not the philanthropists! No, much as they have done for us, much as that prince among men, Sir Wm. McDonald, has done for us, not the philanthropists. The burden is too great for them.

But the state—the municipality, the Province, or the Dominion—must do it.

In one form or other the state safeguards the health and happiness of the workman, prescribes his hours of labor, and even at times his rate of wage. Why should it not educate him?

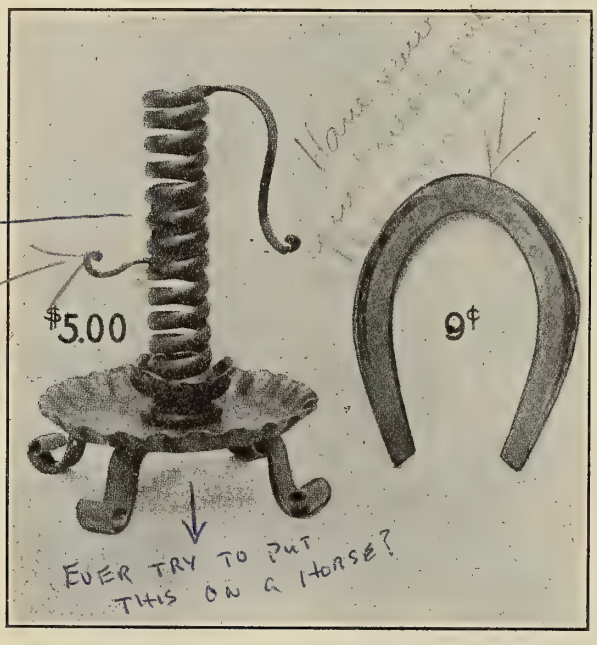
In one form or other it trains him by libraries, pamphlets and lectures. Why should it not give him schools? It aids material progress by charters, bonuses, tariffs and commissions. Why not by industrial education? It maintains higher

schools for the training of boys who enter the professions. Why should it not make provision for that greater host of boys who plunge into the activities of shop and office? To some extent the state has recognized the demand. In manual training, domestic science, and drawing throughout the schools, the city does something in behalf of industrial education, and in the proposed new Technical High School she promises—I love to dwell upon that word "promise"—to do more.

And the Province does something. Permit me to say, indeed, that she does much. Within the last two or three years she has begun to lay well and wisely the foundations upon which alone industrial education may be organized. She has improved the equipment of her regular schools, their courses of study, and their teachers. She has created agricultural and commercial high schools. She now advances boldly with her plans for technical schools.

Difficulties Must be Overcome.

Of course there will be hindrances to the progress of technical education. Organized labor is critical, if not suspicious



The same material is in both articles. The difference between the values consists in the technical skill of the worker.

—but not unreasonably so. You must disarm those suspicions. Organized labor must be convinced that the object of technical education is expert knowledge and not mere rapidity in shop operations, that technical schools are not trade schools, that the graduate of a technical school should not be able to say arrogantly: "I am now a carpenter," or "I am now a machinist," but rather, "I am a better carpenter than I was," or "I shall now become a better carpenter than the shop could make me." Technical schools must not be—pardon the jargon!—scab hatcheries.

And the schoolmaster is critical. In the matter of his education every man is conservative, and every teacher is particularly conservative. What wonder that the particularly conservative teacher looks with doubt upon industrial education? He must be shown that he views the world from his school window; that public education must reflect the national life; that our national life is industrial; that our industrial life is the life of the here and now, and not the life of other centuries and other races.

Finally, the ratepayer is critical—and necessarily so.

No two countries, no two educationists, agree as to the organization of technical education. The world experiments, and experiments are expensive. These experiments have to do, moreover, with great hordes of students whose fee-paying powers are limited, and with teaching plants as varied as the trades and as unstable as machine shops. And so they are doubly expensive.

Who will bear the expense? Not the manufacturer. He now has his own burdens. Not the student. This burden would be prohibitive. Not the municipality. It is burdened to the breaking point with general education. Not the Province, perhaps. Its revenues are limited and already preempted. But the Dominion—aye, there's our hope!

The Dominion has an abundant revenue collected from the people of all the Provinces. It has a splendid asset in Crown lands purchased at the expense of all the Provinces. Finally, technical instruction is a large national issue, not a local issue, and national issues come within the purview of the Dominion and not the Province.

The Dominion's duty in this regard, it must be confessed, has not yet been fully recognized. Federal publicists, when urged to act, take shelter behind the letter of the B.N.A. Act. Education is, in the terms of the Constitution, a Provincial and not a Federal interest!

But trade and commerce are Federal interests. Does not instruction in the trades belong to trade and commerce, and is not such instruction, therefore, a Federal interest? The Dominion maintains a splendid type of instruction in engineering in the Military College at Kingston, and defends its action by the assurance that such technical instruction attaches naturally to militia and defense, which is a Federal interest in the terms of the Constitution. It maintains experimental farms, dairy stations and cold storage centres, with bulletins to instruct the people in the operations of these agencies, and defends this technical instruction as attaching naturally to agriculture, which in its largest phases is a Federal interest in the terms of the Constitution. It goes even further. It maintains commercial agencies in the world's great trade centres, and assists world expositions and national expositions, and justifies this form of technical instruction as attaching naturally to trade and commerce, which are Federal interests in the terms of the Constitution. In the name of all that is logical, should not the Federal Government go further and recognize instruction in the arts and crafts as within the sphere of trade and commerce, and therefore a Federal interest?

Even if technical instruction attached itself wholly to education and not to trade and commerce, the Federal Government might still aid it and be consistent. It assists the Canadian Mining Institute and the Royal Society. It maintains schools of navigation on the inland lakes. Through its grants to the Royal Canadian Academy it aids generally the art schools of the Provinces. Might it not consistently subsidize the science and art of the technical schools?

In Switzerland and Germany are many state-aided technical schools, but more interesting to us—and more pertinent—is the precedent set by the United States. State Rights mean more to the average American than Provincial Rights mean to us. Education is a State Right, and yet in the Morrill Act of 1862 the United States Congress granted the equivalent of 13,000,000 acres of land, valued at $10,000,000, to the various States in aid of State colleges for instruction in agriculture and the mechanic arts. In the Morrill Act of 1890 Congress added to this an annual grant to each State of $15,000 (which increased to $25,000 in ten years). Going even further, Congress made a special annual grant to each State of $15,000 on behalf of an experimental station in agriculture. From all sources the Federal grant to the States on behalf of technical education now amounts to 41 per cent. of the total revenue of all technical colleges in the United States. In the presence of such noble examples, need the Dominion hesitate?

Transportation Problems

ADVANCE IN CARTAGE CHARGES.

THE Canadian Pacific and Grand Trunk Railways have issued special freight tariffs advancing the cartage charges on the first, second, third, fourth and fifth classes of freight governed by the Canadian Classification to 2 cents per 100 pounds, subject to a minimum cartage charge of 15 cents for any one consignment. The same exceptions as heretofore are continued. These tariffs become effective on March 15th. The railways state that the rates published in their freight tariffs are exclusive of cartage, but that at certain stations which are mentioned, and of which there are twenty-two on the Grand Trunk and seventeen on the Canadian Pacific, a cartage service is maintained. At these points when cartage is performed by the railway companies' cartage agents the charge for such service must be collected from the consignee, or, in the case of prepaid freight, from shippers in addition to the freight charges.

The reason given by the railway representatives is that the increase has been rendered necessary by the enhanced cost of delivery due to the greater cost of wages, keep of horses and other expenses, which have led the big delivery companies to increase their charges to the railways, and that the increase will not meet the amount charged the railways by the cartage companies, which is well in excess of 2 cents per 100 pounds.

When the cartage service was first introduced into Canada it was performed without any additional charges; that is to say, all freight in the first five classes was delivered free with certain exceptions which applied to heavy freight. About 1893 the railways decided to make a charge for the service, and added 1¼ cents to the rate. Later on this was advanced to 1½ cents. It is now proposed to make it 2 cents.

Coming as this does almost immediately after the revision of rates ordered by the Board of Railway Commissioners, which became effective on January 1st, shippers are inclined to look upon it as intended to in some degree counteract the order of the Board. In view of the present trade conditions, and the likelihood of their continuance for some time at least, it would seem that the tendency should be towards lower wages and cheaper service. Therefore, the reasons given out for making the advance would hardly be considered satisfactory. More particularly is this the case in small centres, where the service can undoubtedly be performed at a much cheaper rate. Strong objections are taken to the advance in the rate on smalls. Many shippers send out a great number of small shipments in a day. A carter will take sometimes twenty or thirty small shipments on one load. According to the new tariffs a shipper will be required to pay 15 cents for each shipment.

Changes of this kind cannot be brought about without serious inconvenience to the shipping public, and it is to be regretted that an opportunity is not given to discuss them before they become effective. In this connection it may be pointed out that the public are in a rather unique position.

A railway can at any time publish a new tariff of rates. This is done by fyling it with the Board of Railway Commissioners ten days before it is intended to put it into effect. If at the end of that period no complaint has been registered, the tariff goes into effect and becomes law, and as such is binding on the shipping public. It is not, then, the railway which is charging a certain rate; that rate is compulsory under the law. Yet shippers in general have no knowledge of such intended changes. They have not been taken into the confidence of the railways as to the reasons for them. Their first information usually comes when the new rate is exacted on some shipment. Legislation in which they are interested equally with the transportation companies is enacted on the initiative of the latter. The railway companies would consult their own interests by discussing a little more frankly changes which are going to seriously affect their patrons the shippers.

HOW THE ENLARGED COMMISSION SHOULD OPERATE.

THE Board of Railway Commissioners will be enlarged during the present session of Parliament. The Minister has announced that telephone and telegraph companies will also be placed definitely under its jurisdiction. How the enlarged Board will operate is of first importance. As has been well pointed out, it will be of no avail to increase the membership if the whole Board is to sit on every case. That would delay rather than expedite matters. Nor would it be advisable to apportion certain territories to individual members, so that one commissioner would hear all the cases arising in a certain district, and so on, as has been suggested by some journals. The futility of such a system is manifest when we consider that the decisions of the Board not only settle specific cases under dispute, but they have the force of law in all similar cases. A case of inter-switching arising in London would, under this system, be investigated and reported upon by the commissioner for Western Ontario. But the decision arrived at would be final in similar cases arising in Montreal or Winnipeg.

To arrive at the most equitable decision it would seem reasonable to have one commissioner consider the question as it appeared in the different parts of the country, and then from this broad view bring in a recommendation to the Board.

A more conclusive proof of the inadvisability of the district scheme comes from the extensive nature of most questions which come before the Board. A complaint is made of an insufficiency of cars. The shortage is felt by the manufacturers of Quebec and Ontario, by the farmers of the Middle West, and by the lumbermen of British Columbia. How would a district commissioner work to advantage in such a case? The International rate case, the transcontinental rate case, demurrage, how could these be considered by the commissioner of any one locality?

Relief from the mass of work under which the Commission is now struggling should come through specialization. Such is the principle upon which the Interstate Commerce Commission works. One member might be allotted specially to complaints arising out of equipment, another to questions of construction, another to rates, and so on. By this means the commissioners would make their investigations with an eye to all other cases of a similar nature, no matter where they might come up. They would attain a greater expertness through giving their attention to definite lines of enquiry.

The Railway Commissioners have accomplished great work since their appointment. Large powers were vested in them, and they have used these powers uniformly in an effort to bring about a satisfactory understanding between transportation companies and shippers. The elimination of discriminations has in itself amply justified the existence of the Board. That the work has kept piling in and that its scope has been constantly enlarged, as by including express companies under

its jurisdiction, is a proof of the satisfaction with which its work has been received. The enlargement of its membership is the natural result of the increase in its activities.

THE PROPER EQUIPMENT OF RAILWAYS.

CANADA, like most other new countries, has had all too many railway projects, the promoters of which have secured franchises, not with any intention of carrying on construction, but purely with the idea of keeping the franchise alive until some buyer should appear. In a country of magnificent distances like this railways are necessary, and every encouragement should be given to the projectors of new lines, provided only that they are actually going to build and equip their lines adequately. But it is time that some measures were taken to separate the sheep from the goats, for under present conditions the issuance of a franchise frequently results in the holding back of a district from development rather than the opening of it up to settlement.

A franchise is now granted for five years; if the rights under it are not exercised in that time it is usually prolonged for another like period; it may be a mere speculator looking for a buyer; it may be a great railway corporation seeking to forestall a rival. In either case a rich territory may be held back from settlement. An amendment to the Railway Act has been proposed at Ottawa which would in a large measure overcome this trouble. It is recommended that all railway franchises be subject to the provision that 10 per cent. of the road be actually built within two years. The financing of the railroad is not a simple operation, but a promoter asking for a franchise should have some definite idea about his future procedure. It should not, therefore, be a hardship to demand that the *bona fides* of the scheme be demonstrated by the performance of some construction work.

Then there is the subject of equipping the roads after they are built. The Chairman of the Railway Commission has threatened to recommend that new franchises to old companies be withheld until their equipment is brought up to a reasonable standard. This is a fair stand, for if new branches are to be constructed without adding to the rolling stock, the already inadequate equipment will be still further reduced. The desirable condition is to have the branches, with the addition of a proportionate amount of rolling stock. We undoubtedly need transportation facilities. Land that lies twenty miles from a railroad is not of much value; it costs too much to haul products to any point of shipment. Run a line within five miles of the same place and the value of the land will soar. There is land, abundance of it, of the best agricultural quality, lying sixty or eighty miles from a railway in our Middle West. It is altogether desirable that this should be tapped by railroads as soon as possible. It would be the part of wisdom to be somewhat generous with franchises for branch and new lines, but to be insistent on the performance of the work undertaken and on the proper equipment of the road.

The time to make the necessary provisions is when the special Act incorporating the company is being passed. A railway company derives all its privileges from the public. Parliament gives it the right to expropriate private property because it is going to do a service to the public. That is the fundamental fact upon which the relationship of the railways and the public is based. In too many cases the operating companies have failed to recognize that in granting them the right to use the public highways and to take over private property for a right of way, the public has made possible their very existence. This was not done from philanthropic motives, or to provide an investment for capitalists' funds. It was purely selfish; the public granted this in order to get transportation facilities. When a railway company fails to provide a reasonable service it in effect repudiates a bargain entered into with the public. The privileges thus given are specified in the Railway Act and in the special Act incorporating each company. In the same Act should be placed clauses setting forth in detail the services which shall be demanded of the railway. Only when these conditions are fulfilled should the government subsidy be paid. Subsidies are not payable by law till the road is accepted by the government as satisfactory. Heretofore satisfaction has consisted in having a track laid over a fixed course. Rolling stock and facilities for transacting business are no less necessary. It might be mentioned incidentally that a special Act over-rides the provisions of the Railway Act, so that a close scrutiny should be made of the charter of new lines before they are incorporated.

A CRITICISM OF CANADIAN METHODS.

Every once in a while word comes of unsatisfactory conditions surrounding the shipment of goods to New Zealand. Little attention was paid to these complaints for a considerable time, and they were laid to the account of too much business; manufacturers in many cases had so much business that they could not handle export orders. There were some complaints, however, which could not be explained in this way. We have a letter before us from a New Zealand importer to a representative of some Canadian lines, in which the former sets forth that six cases of hardware shipped on August 15th last, had not arrived on December 9th, and this in spite of the fact that two steamers had arrived at New Zealand after the one which should have carried the goods.

A further quotation from this letter will show just how New Zealand merchants look on Canadian trade. There is no one of the criticisms contained in it which cannot be eliminated by Canada, if we only appreciate that the trade is worth going after. The writer states: "We have tried to do business with Canada, but, as you know, so far, the execution of orders has been very unsatisfactory. The greatest drawback, in our opinion, is that there is no direct steamer line from the East coast. Your dependency on New York for shipping of heavy lines militates against prompt delivery. The omission of the name of the steamer from Bills of Lading is also very unsatisfactory. We have no time to watch every manifest that comes into this port in order to find out if a shipment for us has arrived. It appears to us that Canada has to look out for better and more satisfactory shipping facilities before she can rely on an increase of her export trade. We stand not alone in this opinion, as several of our friends have expressed themselves to the same effect. We would be only too glad to give our business to Canada, but as long as the shipping is so unreliable and vexatious, we are obliged to favor the United States."

"Shipments reach us weekly from all parts of the globe, but none give us so much trouble as those from Canada."

This is a serious indictment. We are making gigantic efforts in the internal development of our country. Never a day passes without the subject of transportation being brought forcibly before our attention. Factories have been expanding on all sides. It would be a serious reverse if our efforts to establish an export trade were spoiled by an inability to get our goods to the world's markets.

The Monarch Brass Works, Port Colborne, have shut down temporarily. The manager states the sole reason was the shortage of gas, which is being sent to Buffalo in large quantities.

The Fire Waste and How to Prevent It

By E. P. Heaton, Manager Insurance Department, Canadian Manufacturers' Association

THE fact is generally admitted by all who have given a moment's consideration to the problem of the fire waste, that the Dominion of Canada and the United States stand out conspicuously and unenviably as countries in which the fire-fiend, year after year, proves a tremendously destructive force. While this fact stands unquestioned, it is perhaps not generally known how completely they eclipse all other countries in the per capita loss thus sustained. The writer fully recognizes the difficulty in obtaining and presenting reliable data on the subject, but the Committee on Statistics of the National Board of Underwriters, through the co-operation of the United States Consular Service, at their annual convention held in May, 1906, presented in part the following statement :

Country.	Annual Average Fire Loss.	Loss per Capita.
Austria	$7,601,389	$0.29
Denmark	660,924	0.26
France	11,699,275	0.30
Germany	27,655,600	0.49
Italy	4,112,725	0.12
Switzerland	999,364	0.30
United States (to 1905) ..	173,323,541	2.47
do. (1906) ..	231,000,000	3.30
Canada (average for 5 years)	11,012,207	2.00

Great Britain is not included in this list because the information is unobtainable, but we know fire insurance rates in that country are about one-fourth of what they are in Canada, with a larger margin of profit, and it is therefore fair to presume that the per capita loss is reduced in the same proportion. It cannot exceed $0.50, and may, therefore, be said to rank about equally with Germany. How far we may be from the mark in this guess we cannot say, but for the purposes of this article we will assume we are not very far astray. Let us, therefore, put it down at $0.50, or something under $20,000,000.

It is not easy for the average man to understand what the tremendous fire waste of the United States and Canada means. How little, for example, does the ordinary mortal know what a million dollars signifies; the term implies so much that one fails to grasp its true significance; in the above table it is shown that the average annual fire waste of the two countries is about 185 million dollars ! If we are dazed in the contemplation of one million dollars, we get mental paralysis when we speak of 185 millions.

A Startling Comparison.

Let me suggest a comparison which may help to bring home the great significance of this vast total. For the year 1907 the total assessment of the City of Toronto is $184,632,463 ; the fire wastes of the United States and Canada each year practically represents the complete obliteration of a money value equal to the assessed value of all the real property within the corporate limits of this thriving prosperous city. Periodically the world stands aghast at the spectacle of a San Francisco or a Chicago conflagration, and for a brief period thereafter men wonder and plan how these may be averted ; alas, the warning is soon forgotten, the episode has been a nine days' wonder ! Yet the startling fact remains that each year there is consumed on this continent a value far exceeding that destroyed in the unparalleled disaster of San Francisco. The marvel is that the people do not understand that this is not the insurance companies' loss, but the actual, positive, direct loss to the whole people, without one atom of compensation or advantage.

Why the Loss and What the Remedy.

There naturally arises from the consideration of these preliminary remarks the following questions :—

1st. Why should the fire loss be so much larger on the continent of North America than in any European country ?

2nd. In what directions may we look for corrective and remedial measures ?

The first question is apt to be answered in many ways, and agreement on the subject between any number of people of varied interests is impossible; it would, therefore, be folly on the writer's part to attempt to reconcile the divergent interests or to lay down his own "ipse dixit" by way of offering an acceptable solution. Probably, however, each of the following causes may have contributed something to the general result, viz :—

Climatic conditions,
Deficient fire protection,
Insufficient water supply,
Inferior construction,
Narrow streets,
Height and area of commercial risks,
Exposures across alleys, lanes and yards,
Fortuitous circumstances, as the earthquake at San Francisco, etc.

In considering the question of the loss per capita it may be that there are economic reasons which, in a measure, at least, make the contrast between the United States and Canada on the one hand, and European countries on the other, less conspicuous and alarming ; possibly the greater per capita wealth of this continent might be urged as a set-off, but reasoning of this nature is much too abstract and academic to justify further consideration here.

Where the Blame Lies.

For the existing conditions of things blame is generally placed upon the people, who, it is claimed, build foolishly, who are lax in enforcing municipal regulations—in a word, it is the people's fault ! ! There is, however, another side to this question, which may be stated in the universal law of supply and demand. It is the business of the insurance companies to provide protection and indemnity. So long as the demands of the insured for protection and indemnity are fully met the question of cost is about the only one that counts, and even that point is regulated by the same law of supply and demand. Suppose, for a moment, the supply of insurance was curtailed by one-half, and in the conflagration district of cities such as Toronto, Buffalo, Pittsburg, Philadelphia, New York, etc., merchants, manufacturers and others could not buy insurance to an extent of more than one-half their requirements, what would happen ? Assuredly the rate would go up, that goes without saying, any little excuse will cause that ! ! But would merchants and manufacturers quietly and meekly accept the situation and be satisfied ? Hardly. Nothing would more quickly contribute to a distribution of risk or to greater care in construction and protection ; without this stimulus the cost of handling goods

is of infinitely more importance than the cost of insurance thereon, and features of distribution, care and protection, necessarily take second place.

The writer admits that he has thus interpolated a feature that is, perhaps, foreign to the subject of the article, but there is, nevertheless, something in the thought of the last paragraph that has an indirect bearing on it, and which it would be exceedingly interesting to pursue. Twenty-five years ago a wholesale dry goods importer would pay a rate of from 40 to 50 cents per $100; he now pays on risks similarly built and protected a rate of from $2.00 to $2.50 %. To trace the cause of this tremendous increase would without doubt afford an object lesson in the law of supply and demand. The people are not alone to blame!

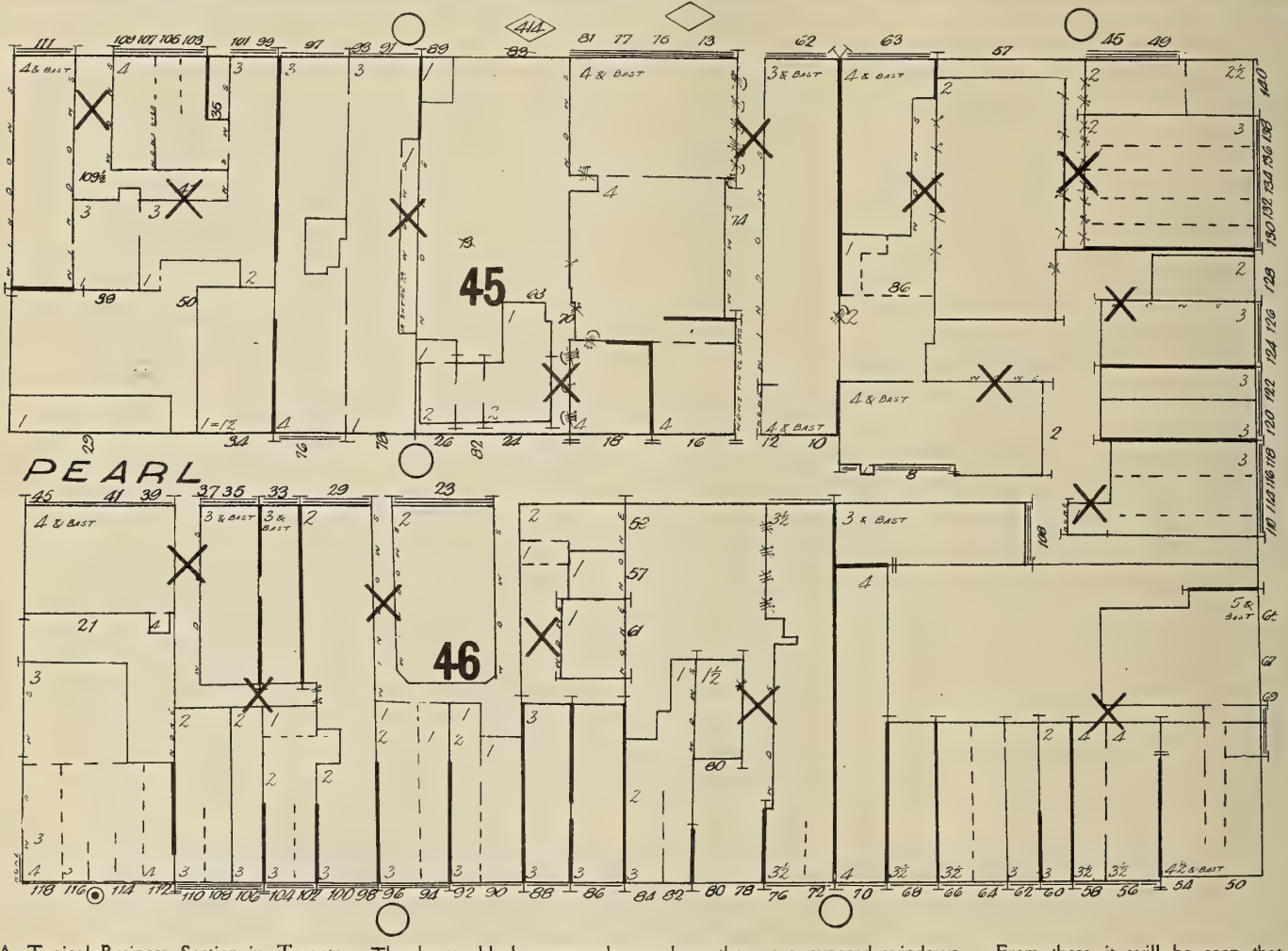
Corrective and Remedial Measures.

What can be done to remedy the existing state of affairs? leavening process must be slow and tedious, so slow, in fact, that up to this date there has been no evidence that the improvement so far carried out has lowered by a fraction of a cent per capita fire waste?

It is true that every building, constructed and protected on the most modern principles so far discovered, creates an additional fire stop, or fire-fighting zone, and, therefore, should in the very nature of things, improve the situation, but have not recent fires in so-called fireproof buildings where inflammable goods are stored, demonstrated an interior weakness, which if put to the test of exposure from a conflagration, would be greatly accentuated?

Heroic Treatment Necessary.

While all that is being done is highly commendable, it does not strike at the root of the difficulty; like a festering sore it requires heroic treatment to be effective, and the remedy



A Typical Business Section in Toronto.—The heavy black crosses show where there are exposed windows. From these it will be seen that a wind from any direction will spread a fire if it once got under way.

There is probably few more serious questions than this before the public mind at the present time, and associations of municipalities, engineers, architects, fire brigade chiefs and insurance companies, to say nothing of the scientific and industrial press, are contributing very largely to the elucidation of the subject. There is, however, an apparent weakness in the work that is being done by these bodies in the side from which the subject is being approached. Largely, if not entirely, the main efforts of these various associations of men, with the exception perhaps of the fire insurance associations, are starting from the point of improving the class of construction of *new buildings*, and in this way making the lump of leaven leaven the whole. But what about the general mass of property, particularly in congested areas, where the must, it seems to us, come from somebody clothed with authority to order things done.

Where human life is endangered the municipality orders that this shall be done or that removed, and unless political "pull" steps in, the orders are carried out. Thus are the storage of explosives regulated, the exits from places of public entertainment made to meet emergencies and fire escapes provided. Is there to be found a municipality which will consider the fire waste, viewed in connection with conflagration possibilities, to say nothing of probable accompanying loss of life, and apply preventive measures in a whole-hearted heroic manner? If one such municipality could be found, we should have an object lesson for the world in grapp'ing with an evil already described as one of tremendous force.

What Should be the Remedy?

Extreme boldness would be the characteristic of him who would attempt to teach mankind what the complete remedy should be,—truly would it be a case of a fool entering in where an angel fears to tread. Nevertheless, there are some practical things a municipality might do, each of which would contribute to a better state of things, and the sum total of which would be correspondingly better. Approving and endorsing the best of the many good laws for all new buildings, here are a few other things that might be done while not leaving the others undone :—

1. In all modern buildings wherein there is any accumulation of burnable property, insist upon automatic sprinklers being installed. The fire in the Parker building at 225-233 Fourth Avenue, New York, destroyed a few days ago, would doubtless have been caught and stopped at the fifth floor, where the fire started, if the property had been so equipped. This was nominally a fire-proof building, crowded with readily-burnable property, and the fire extended throughout the structure. The chief of the New York brigade is quoted by the *Journal of Commerce* as saying in reference to this fire : "If there had been a high wind the other night it is hard to tell where the fire would have stopped." The lesson is obvious, even in so-called fire-proof buildings.
2. Insist also upon the installation of automatic sprinklers in all buildings where concentration of values or class of occupancy, make it at all practicable. An efficient system of automatic sprinklers is the highest type of fire-fighting appliance, and the ideal check to the fire-fiend's voracity. No mistake is made in insisting upon its use to the utmost possible extent. Toronto in 1904 was saved from a much more disastrous conflagration than then visited the city because of the automatic sprinkler equipment in a large manufacturing establishment on the west side of Yonge Street.
3. Introduce party walls, parapet roofs, and remove wooden cornices wherever possible. Large areas under one roof increase the chances of a heavy loss on the contents of a building, and help to create a volume of flame that is dangerous to neighboring buildings. The cost of carrying out this great improvement would be comparatively light in proportion to the benefit that would be derived.
4. See that all skylights,—a dangerous and prolific source of spreading fires—are made by the use of wire, glass and metal frames, to prevent a fire outside communicating with the inside.
5. Similarly protect with modern coverings all exposed windows and doors across alleyways, narrow lanes or streets, courtyards or extensions. This, probably, is the most simple and effective remedy that can be suggested, yet it aims at and would, in the writer's opinion, contribute more than anything else to the elimination of the most dangerous existing hazard.
6. Let there also be used as freely as possible the outside water curtain, which is a standard exterior protection that over and over again has demonstrated its efficacy in creating an effective fire-stop.

There are many other simple improvements that can be applied gradually to the interior of existing buildings, but in these respects we are passing out of the realm of the exercise of municipal authority. The remedies we have suggested are practical, and, with the exception of the introduction of automatic sprinklers, could be installed at comparatively small cost. Why should not some serious effort be undertaken to enforce their completion ? The result would, we are sure, be so eminently satisfactory as to leave no regret that the power enjoyed by the municipality had thus been brought into play. If this tremendous fire waste was recognized to one-half its real extent, no plea for the exercise of such power would be necessary.

Exposure Across Lanes, Alleys and Courtyards.

I have already pointed out, in suggestion No. 5, what I think to be the most dangerous existing hazard and the remedy therefor. A glance at the typical Toronto block in skeleton form, now published, will furnish the fullest evidence of the point that is made. Mark the serious exposure from one building to another, and if this sketch does not loudly proclaim the necessity for municipal interference and the exercise of municipal authority, I fail to imagine anything, save the destruction of the block by fire, that will. If, too, the remedy is so easily and cheaply found, can there be any legitimate reason why it should not be speedily applied ?

MANUFACTURERS' AGENTS.

Almost daily letters are received by the Secretary from commission and manufacturers' agents, offering their services to Canadian manufacturers. These letters come from Great Britain, Belgium, Australia, South Africa, the West Indies, South America, in fact, all parts of the world. Among them are a few from Canadian agents who desire to represent manufacturers in Western Canada or Eastern Canada, as the case may be. In some cases the prospective agent outlines a definite proposition on which he will work, while others merely express their desire to act as agents in their respective countries in a general way. Most of them will handle any lines that will sell in their territory. A few specify the lines they can handle.

There is no doubt that most of these enquirers are reputable agents and mean business. But the Secretary, except in a few instances, finds it impossible to place them in touch immediately with Canadian firms who desire representation, because he has no knowledge of the firms who are open to discuss an agency proposition. There is no doubt that there are some Canadian firms who would be glad to communicate with each enquirer who writes the office, and the Secretary therefore requests all Canadian firms who are interested in receiving particulars of agents' inquiries to notify him at once to this effect, specifying, if possible, the lines agents could handle for them, and the country or territory they wish covered. A list will be compiled from replies received and firms therein notified immediately of all inquiries received at this office from agents. This is a very opportune time to build up an export trade, owing to the slight depression which is prevailing in the home market and the Association is adopting this plan with a view of assisting its members in obtaining a foreign market.

A Definition.

A pessimist is a man who blows out the lamp to see how dark it is.—John R. Mott.

Automobiling in Canada

Some Considerations in the Buying of a Car

WITH the first suggestion of Spring weather the subject of automobiles takes on a renewed interest. The present month will see the big automobile shows in Toronto and Montreal revealing in all their splendor and attractiveness the 1908 offerings of the manufacturers.



A Russell in the big tree in British Columbia.

During the next few weeks the buying of cars will go on apace. The use of cars has so widened of late that it may fairly be expected that this year will far outrank any previous season in the number of the automobiles purchased. The rise of various automobile clubs and leagues has introduced an element of fellowship and mutual assistance that has added greatly to the popularity of motoring.

The all important question now is that of "make." Consistency is a jewel; it is only fair for Canadians to carry their theories into practice to the extent at least of investigating the qualities of Canadian made cars before buying. The advertisements of foreign cars reach Canada in enormous quantities through the medium of the United States magazines. Manufacturers from across the line can afford to use these papers, expensive as they are, because they are reaching the extensive population covered by them. It is, of course, out of the question for a Canadian manufacturer to pay advertising rates for a circulation of hundreds of thousands, when only a few hundreds come to Canada, where alone he can get results. Consequently, the Canadian public are familiar with the names of foreign made cars, with the appearance of them and with their speed and endurance records, better even than they know the cars which are built at their very doors.

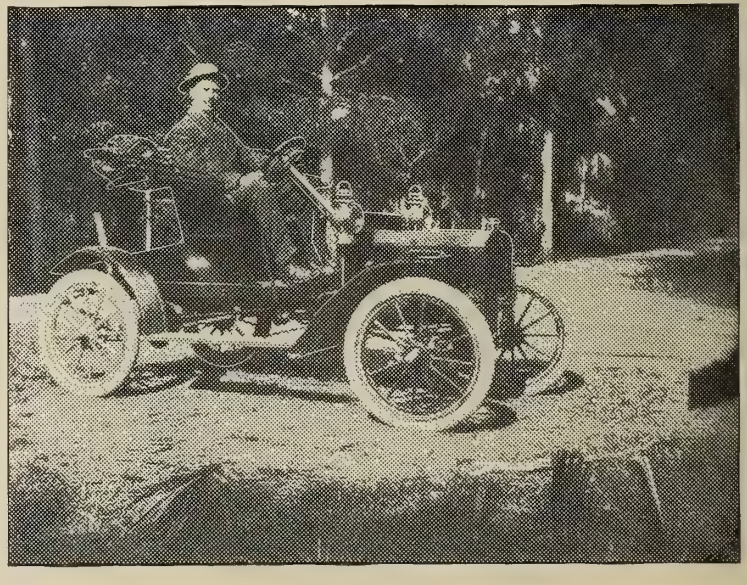
Advantage Rests With Canada.

And yet a common sense consideration would indicate that the chances for producing a satisfactory machine rest strongly with the Canadian manufacturer. Our manufacturers have been building cars as long as or longer than many of the foreign companies which are now selling cars here. It should be distinctly understood that we have passed the experimental stage; our factories are just as well equipped, have just as efficient designers and just as skilled workmen, as have those in any other country. But they have this additional advantage. Each year suggests some improvements on the design of the previous year. A new design does not mean a few changes in the appearance, a different color, or more luxurious appointments. It means definite changes in the working parts of the machine, made in consequence of close observation of the working out of all the cars of the preceding year. As the season develops breakages may occur, weaknesses may appear, the motive power may not be securing the maximum of effectiveness, the set of the car may not be most suitable for the roads, the wearing of the springs may indicate where changes can be made to advantage. The manufacturer and his staff watch every one of these points, and countless others, and the car of the following year is designed to overcome these weaknesses.

Now, the great majority of cars manufactured in the United States or France are sold in those countries, so that the observation of weaknesses consists in rectifying errors of manufacture as they develop in those countries. But the fine roads of France or the well paved streets of the cities of the United States do not develop the weaknesses which are developed by the roads of Canada. Hence the improvements from year to year are not aimed at covering the difficulties which arise here. They are intended to satisfy the conditions obtaining abroad, where the chief market lies.

Made for Local Conditions.

Not so, however, with the Canadian manufacturer. His market is Canada. Every improvement which has been made from year to year has been made to satisfy the exigencies of local conditions. As a result a peculiar type of car has been developed, embracing features which are not found in the cars of any other nation, cars built to travel on



A Ford in Action.

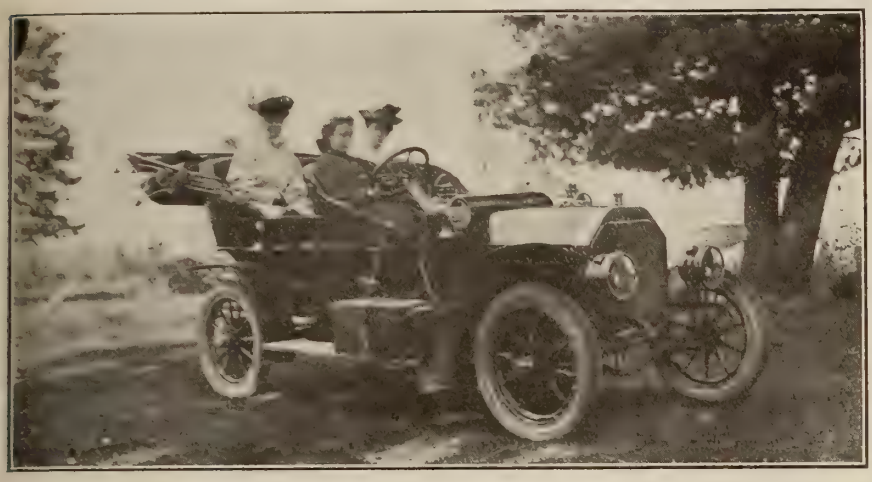
Canadian roads, to endure Canadian weather, cars built distinctly for the people who are to use them.

This is an elementary consideration which should be kept in mind by intending buyers of automobiles. It is not a case of favoring a Canadian car because it is made in Canada, excellent as this principle is; it is a case of favoring a Canadian

car because it is built with the one object in view of meeting Canadian conditions, and so may be presumed to be more satisfactory under these conditions.

Rise of the Industry.

The manufacture of automobiles began in Canada in 1901, when the Canada Cycle & Motor Co. commenced building cars



A Holiday Party in an Oldsmobile.

in Toronto Junction. A year later Canadian Motors Limited established a factory in Toronto, but the electrically driven machine was not destined to meet with immediate success, and the Company went out of business. The Ford Motor Company next entered the field, making Walkerville their manufacturing base. Soon after the Oldsmobile Company began manufacturing their cars in St. Catharines. Following them came the Comet Motor Co., who manufacture in Montreal, and the McLaughlin Motor Car Co. of Oshawa, who have brought their cars out this year for the first time. The Chatham Car Company, who commenced business last year, came to an early end, and have discontinued manufacturing.

A wide range of cars is shown by Canadian manufacturers, more extensive in style and price than in any previous year. A few are shown in illustration of this article. They run from the jaunty runabout to the lordly landaulette, and vary in price from $750.00 to several thousands. Although the working mechanism is the essential part of the car, of almost equal importance are those things which go to make up its general appearance. An automobile is a luxurious vehicle. Its lines suggest power; it is perfect in finish, and its upholstery is all that a desire for comfort can suggest. It is little wonder that the owner of a car grows in enthusiasm from year to year and that he who is not so fortunate is living in more or less patient hope that some day he may be the proud possessor of one.

Its Growing Popularity.

Motoring is in the springtime of its popularity in Canada. The sport or system of locomotion—which shall we call it?—is growing in favor from year to year, not with the growth of a fad, but with the knowledge that enjoyment and healthy outdoor recreation are necessary antidotes to the strenuous existence of the average business man. It has become more than a pleasure; it is a necessity. As a consequence motor cars have changed from being the perquisites of the rich to being the ordinary vehicles of the successful man. Whereas a very few years ago they were never seen outside of two or three of the biggest cities, now the prosperous merchants of the smaller towns are joining the school of those who believe in enjoying life while they are living it. Conditions are improving. Each year finds the automobile more complete, more perfect, less liable to go out of order; each year the roads are being improved, both in town and country, making the pleasure of touring ever greater.

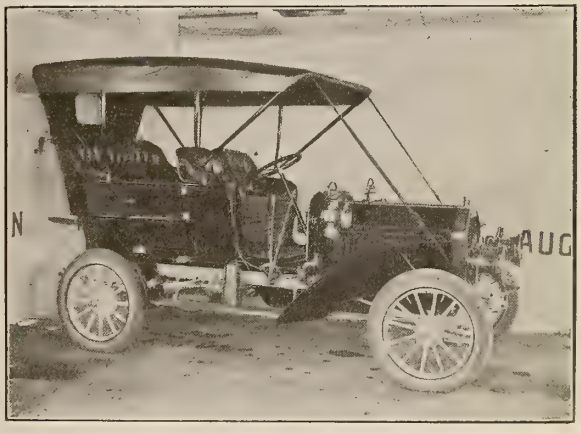
Nor can anyone point to a country which offers more to the tourist than does Canada. It is replete with scenic splendors, showing in its broad expanse a variety of landscape of unequalled interest. So true is this that there is a constant stream of tourists from other countries revelling in the beauties of nature which most Canadians are themselves too ignorant of.

AN AUTOMOBILE SHOW.

From March 21st to 28th an automobile show will be in progress in the St. Lawrence Arena, Toronto. Arrangements are rapidly approaching perfection for the great occasion, when the motor vehicle can be seen in all its glory. Excellent displays are promised by all the Canadian manufacturers of automobiles, including the Canada Cycle & Motor Co., Toronto Junction, the Ford Motor Co., Walkerville, the Oldsmobile Co., St. Catharines, and the McLaughlin Motor Car Co., Oshawa. In addition to these the tire manufacturers, the Dunlop Tire & Rubber Goods Co., and the Canadian Rubber Co., and the motor boat and accessory manufacturers will be represented. Among others exhibiting will be the Canadian Fairbanks Co., Montreal; McKeough & Trotter Chatham; H. E. Gidley Co., Penetang; U. R. Thompson, Brantford; Beaudry Gasoline Co., Montreal; G. W. Lowney Co., Toronto; Conboy Co., Toronto ; the International Carriage Co., Brighton, Ont.; S. F. Bowser & Co., Toronto, and the Gutta Percha & Rubber Mfg. Co., Toronto.

TAX EXPRESS COMPANIES.

A bill to amend the Assessment Act will be introduced at the present session of the Ontario Legislature. At the present time there is a divergence of opinion among members of the Bench as to the liability of express companies to be assessed for municipal taxation in those places where they transact business through the local railway agent. Judge Mabee, in a recent judgment, ruled that the words "mainly



A McLaughlin-Buick Car.

carry on express business" in the Assessment Act precluded the assessment of express companies by municipalities under the conditions mentioned, while, on the other hand, the rulings of all the County Court judges who have dealt with similar cases state that the business tax can be levied for the portion of the railway station and land occupied by an express company.

What to Read

INTERNATIONAL WEIGHTS AND MEASURES

ANY business man wanting full information on the weights, measures and currencies of different countries—and who does not?—can now find it in a convenient little volume just issued by the Macmillan Co., of Canada, for the small price of 90c, "The Weights and Measures of International Commerce, Tables and Equivalents," by Hatch and Vallentine (Toronto, 1907). It seems strange that in spite of the myriad of books pouring from the press it is still possible to say of any one that it fills "a long-felt want." The present little book, however, deserves the compliment. It explains and compares, in its 59 pages, the units used in different countries, gives tables converting them into metric and British and vice versa, and includes a table of comparative prices and rates of exchange. One little geographical slip is noticed in referring to Vancouver Island as if it were a separate colony.

TECHNICAL EDUCATION THE GREATEST PROBLEM IN THE UNITED STATES.

In "The Outlook of the Average Man," Mr. Albert Shaw, (Macmillan Co., of Canada, $1.25), gives a gentle surprise to the reader. From the title one would rather expect a discussion of opportunities for the young mechanic and artisan; the book, in fact, gives an account of general, political, industrial, and social conditions in the United States. In this sense it is an Outlook.

The volume is made up of a series of addresses given to College students, and is consciously not ponderous in style, not overly critical, yet it is frankly suggestive. The people of the United States, it bears witness to, are coming to see clearly that making a great nation is not all smooth sailing; that to have to put up at the same hostelry with a rainbow of different nationalities and to live up to the principle adapted to the select, early colonial days—universal suffrage—is a severe strain on the democratic enthusiasm even of Mr. Shaw.

Mr. Shaw ever holds his hands over his eyes when he comes to the Philippine problem. That the United States should have given twenty millions to relieve Spain of the expense of governing these, and one hundred millions and more already in vainly trying to make the natives enthuse about western ideals, is one of those funny things in the, shall we say, diplomatic history of the world that can only be explained by the dear but terrible name of party politics. American experiments in the Philippines will do good, however. They will show the world whether the South Sea Islander can be civilized or not, and inferentially what western civilization can do for the Asiatic. And that is a mighty thing.

Mr. Shaw hits the nail on the head when he points to "The greatest problem that confronts American statesmanship"—education. "We must," he says, "consciously make our school systems minister to the solution of our social and industrial problems; technical education, and healthy individualism go hand in hand." This is a view of technical education that we are glad to note our Dominion Government is apparently sharing in practically, in promising a recent labor deputation to appoint a royal commission of enquiry.

THE MONEY STRINGENCY.

MR. GEORGE D. GRIFFIN, who has been a consistent advocate of protection in Canada for over sixty years, gives the following explanation of the present stringency of money, from a close observation of economic conditions extending over a very long period:

The increasing financial stringency is a question of surpassing importance, worthy of the fullest consideration. The comments of the press, so general in Canada and other countries, show that the cause of the scarcity of money is in many minds a yet unsolved problem, the result of want of the information that will herein be presented.

Excess Imports.

Is not the cause of the financial difficulty the result of imports in excess of exports to pay for them? Referring to this B. E. Walker, Esq., in his address to the stockholders of the Bank of Commerce at their annual meeting, November, 1905, in his anxiety in relation thereto, said that the excess was a mortgage upon the Dominion. The Toronto News of August 21, 1907, quoting from the current Quarterly Review, reported that Canada's debt to Great Britain was now over $1,224,000,000. The Government returns prove that in round numbers the amount is the same as our imports in excess of exports since 1850, not a dollar of which has been paid, and in round numbers we have paid about $1,250,000,000 of interest thereon, and are still paying interest. The fact is confirmed by The Toronto Globe about the same date as The News, that our present payable interest to Britain is $60,000,000 annually, that is an average of 5 per cent. on the amount. The $60,000,000 is an average of about $50 per family for the 6,000,000 population of Canada. This indicates one cause of the scarcity of money.

A Worse Exhibit.

The total imports for the past five years as given in the Government returns, is $1,412,000,000, and the exports, $1,167,000,000. The excess is $345,000,000 at invoice prices, and which B. E. Walker describes as a "mortgage" upon the Dominion. It is that much of the $1,224,000,000 debt for excess imports above cited. The $345,000,000 is an average of $288 of Dominion mortgage per family in five years upon the 1,200,000 families in the Dominion. The bank returns show that they furnished the importers over $200,000,000 of the amount in gold and on which the importers had paid no interest from Canadian earnings. Nevertheless, the banks today have much larger vital assets than a year ago. No wonder B. E. Walker, in his report in The Monetary Times of January 12, 1906, said that the mortgage the importers were laying on Canada was increasing too fast. Is it any wonder that the borrowing and scraping for more money otherwise than from the banks by so many importers to cover the balance is making money scarce?

From the United States.

The government returns show that the excess imports from the United States in the five years in excess of what they purchased of us that we could, and under wise legislation would have made in Canada, was fully the excess of our imports for the five years, and that for them our importers poured the $345,000,000, or nearly $70,000,000 a year, into the lap of the United States to pay their workmen to make goods for Canada, thus depriving their customers, for whom they imported, of work and ability to purchase and pay for their imports. This is amply proved in the $200,000,000 which they have borrowed of the banks, and for which, as yet, the bank returns show that too many of them have not paid any interest from Canadian earnings.

Cost Finding in the Factory*

By Kenneth Falconer

THE value of many efficient systems of cost finding, not alone in the foundry industry, but in connection with other lines of manufacture, is frequently lost by failure to fully realize the end and aim of cost finding. In planning a system of cost finding, whether for a foundry employing one moulder and a helper, or for the largest industrial establishment in existence, it should always be borne in mind that the finding of costs is a means to an end—not an end in itself. The justification of any cost system is in direct proportion to its influence towards increased profits. This influence may be exerted along one or more of several lines, study of the results secured and judicious action based thereon; reduction of costs, increase of sales, and (not by any means least) elimination of unprofitable business, are directions in which an efficient cost system should tend towards increased net profits; looked at from this standpoint, a system of cost finding becomes as direct an influence towards increased profits as any mechanical betterment of plant, or any improvement of the selling organization. A manufacturing plant is a productive tool, its general organization being the cutting edge; a cost system is the test whereby the management is able to keep the cutting edge in the best possible condition, and to secure from the operations of the tool the maximum efficiency.

Records Up-to-Date.

Another essential point in a cost system is that the information secured by it shall always be a matter of current record—not ancient history—that the facts presented may be used before conditions have so changed as to make the information of no interest or real value.

Another point frequently overlooked in devising and installing cost finding methods is the harmonizing of such methods with the general scheme of commercial accounting. To secure the best results, methods of cost finding and the general scheme of accounts should each be part of one general plan covering records of all operations and transactions from the purchase of raw material to the shipment of finished product; also the data and information secured by the operation of a cost system should be susceptible of proof by comparison with the general results of the business as reflected from time to time in the general books.

There are other most important considerations to be borne in mind in order to secure the best results of any system of cost finding. Amongst these may be mentioned the tabulating of results in such manner as to automatically draw attention to any abnormal variations in costs.

What Cost Includes.

There is one feature in relation to "Costs," to which I would call your attention, and that is the regrettable frequency with which the word is regarded as meaning cost of product. A thorough cost system should take cognizance of all "costs" of the business, which, broadly speaking, may be divided into three classes: Cost of production; Cost of administration; cost of selling.

It is a truism to say that cost of product is composed of three factors,—material, direct labor, and manufacturing expense. It is, however, not a truism to say that while in a great many instances the cost of direct labor and material is carefully watched and kept down to the lowest possible figure, the expense cost of product is not analyzed and studied to secure the greatest possible opportunities for economy of manufacture; yet it is this item of costs which, in the great majority of cases, affords best opportunity for cost reduction, and this, without entailing the risk of labor disturbances which attempts to reduce labor costs very frequently cause.



Mr. Kenneth Falconer.

A Modest Beginning.

In planning to secure record of the cost of manufactured product, it is not always advisable to undertake at the start an analysis of expense cost to the extent to which it is recognized it will be ultimately advisable to go; it is rather better to get the cost system running accurately, showing the three factors of cost of product, vid., direct labor, direct material and general expenses, and then gradually install methods by which the expense costs may be analyzed to such degree as to afford opportunity for study and comparison of the different items which go to form this expense cost with a view to lessening it.

Assuming a cost system securing accurate record of labor, material and expense cost of product analyzed to such extent as to meet special requirements, the tabulating of the data secured has a greater bearing on the "Dollar and Cent value" of the cost system than might be thought possible. Recording the results of similar operations and transactions in parallel columns month by month does not sometimes convey as much meaning to those interested in the welfare of the business as recording the information each month in conjunction, not with similar records of preceding months, but with items of related interest for the same and current months. Figures in themselves often fail to convey information which may be seen at a glance by means of curves and diagrams. For instance, if your labor cost per pound increases a fraction of a cent each month for twelve months, and this information is recorded in figures, it will, of course, be immediately noticed; if, however, your labor cost fluctuates, increasing slightly one month, decreasing the next, but always increasing a shade more than decreasing, you will hardly have the fact of the constant increase brought so clearly to mind as if the information is recorded by curves and diagrams, showing at a glance the constant upward tendency of your labor cost.

In finding the cost of castings, as in finding the cost of

*Address delivered before American Foundrymen's Association.

any other manufactured product, it is always well to draw a definite line of division of cost covering operations up to definite point. It is generally recognized that a foundry cost system should show the cost of molten metal as the first defined point, followed by clear lines of definition between the several stages of completion. A Foundry Cost System which simply takes note of the average cost per pound of castings produced would probably work very satisfactorily if you could apply it to a foundry turning out from month to month its entire product composed of articles of exactly the same size, weight and quality. I do not imagine that anyone here represents a foundry working under such conditions; if so, he is to be congratulated, and his cost problem is a simple one. Where, however, as is the case in the great majority of foundries, the output is composed not only of castings varying in weight, but of articles, the cost of which (other than metal) varies widely, the average cost per pound is a misleading basis on which to make estimates or figure costs, profits or losses.

Some of you may have seen at a recent convention in Philadelphia a pamphlet on foundry costs, in which the statement is made that to "buy or sell castings at an average price per pound as though they were pig iron or coal is about as accurate as to buy or sell buildings at an average price per thousand bricks, or to buy or sell clocks, chairs or locks at an average price per pound."

Common Errors.

The statement is frequently made that it is impossible to secure accurately the cost of each individual casting made in a foundry turning out a large variety of product. This is probably true, but even the admission of this is no argument against getting as close to perfection as possible. Of course, if it could be done with a moderate expenditure of time at a reasonable cost, it would be very desirable for foundrymen to get the exact cost of each casting, and in case of special work, and exceptionally large castings, this information often may be, often is, and still oftener should be, obtained. In the case of a foundry producing a variety of castings, the use of one average rate per pound is absolutely misleading and unreliable. Between this, and the cost of each individual casting a compromise is to obtain the cost of product by classes.

If the output of a jobbing foundry is divided into two clearly defined classes, and the average cost of each class is recorded, that foundry is nearer securing correct costs of product than its competitor which uses only an average cost per pound for the entire output.

The number of classes into which it is advisable to separate the product depends in each instance on existing circumstances and conditions. I have in mind now a brass foundry which some years ago was dividing its output into two classes of castings, red and yellow; the division of cost as between these two classes was an arbitrary one, fixed largely by the ruling market price of copper and the guess of a very intelligent foreman. That foundry turned out a variety of brass castings ranging in weight from a cast nut for a basin cock to a tuyer weighing perhaps 300 pounds. Their output ranged from a cast handle for a compression bib to an intricate British Coat of Arms, measuring approximately 6 ft. x 4 ft., and weighing, perhaps, 4,000 pounds (which coat of arms, with an accompanying inscription plate, is now on the Jubilee Bridge across the St. Lawrence at Montreal).

The foundry referred to is now dividing its output into something like eight or nine different classes of castings; not only that, it is keeping record of the cost of special individual castings to a greater extent than formerly, which, by the way, the proprietor recently told me had proved of real dollar and cent value to him in figuring the cost of his finished product.

Some Suggestions.

My first suggestion for cost finding would be, if you have not a cost system, get one, not only for the sake of your individual profit, but for the general betterment of the trade. There is no surer way to put any manufacturing industry on a sound and legitimate basis than to have all concerned with that industry know just what their product is costing them.

My next suggestion would be, if you have a cost system, improve it; from one whose entire work is devoted to the question of manufacturers' costs and cost accounting, it may seem somewhat surprising to hear sincerely stated the belief that it is an exceedingly poor system of cost finding which cannot be improved; by that I mean it is a poor system of cost finding and a very poor system of accounting which is not sufficiently flexible to meet changing conditions from time to time.

My next suggestion would be to take a broad view of what is meant by "costs" and to always bear in mind that finding costs is a means to an end—not an end in itself.

I would also suggest that the cost system at the start be very simple. Many otherwise efficient and valuable systems have been rendered worthless by what is commonly called "too much red tape"; by which I mean recording a mass of



Part of the Cost System—The Stock Room.

detail that those interested could not study or use; thus burying the results of the cost finding methods in a mass of figures, some of them valuable, some of them worthless.

Find What Information is Valuable.

I would also suggest that before undertaking to secure record of the cost of castings produced by the plants in which members of this Association are interested, a very clear idea be determined upon as to just what information it is desirable to secure, and just how the information secured may be used towards reducing costs or increasing net profits.

One other suggestion, and I have done; there are very few here, I imagine, who believe that the plant with which they are connected is absolutely perfect, yet this does not prevent striving to get as near mechanical perfection as possible. The moral is, if you cannot get a perfect cost system, get as near to it as you can. If you cannot get accurate individual costs of castings, get at least an average cost of two classes of product, three would probably be better, four perhaps better still. It is up to each individual foundryman to determine whether five would be better than four, six better than five and so on.

The Stratford Shoddy Mills were destroyed by fire during the month, causing a loss of $3,000.

TORONTO BRANCH.

At the regular monthly meeting of the Toronto Branch Executive it was decided to make an effort to induce British loan companies to establish branches in central points in Canada with a view to facilitating the making of loans to business men on ordinary first class investments. Your Executive has taken steps to have this proposal thoroughly investigated in London, England, through leading financial men, and to have articles published in leading English papers and financial journals calling attention to the big field there is in Canada, particularly at the present time, for loan companies for the profitable investment of English capital. The matter will also be given publicity in the columns of INDUSTRIAL CANADA, and it is hoped by these means considerable British money will be attracted to this country for loaning on ordinary securities.

Parks Re-organization.

The Executive will work in conjunction with the Guild of Civic Art in its efforts to have the parks system of Toronto re-organized and run on first class business lines. With this in view efforts will be made to have the City Council create a Parks Commission, who will have full control over the whole park system of the city.

Relief Fund.

The Branch is making an effort to raise a special relief fund of $1,000 for the relief of the unemployed poor in and around Toronto, and is asking each of its members to contribute $2.00 towards this fund.

Branch Luncheons.

Mr. E. A. DuVernet will address the members of the Branch sometime in March on "The Relations of Labor and Capital in Ontario." The date will be announced later, and a general invitation is extended to all the members of the Association to attend this meeting.

The Branch will make a grant of prize books to the Technical High School for the years 1908-9 for competition among the pupils of the night school.

MONTREAL BRANCH.

At the monthly meeting of the Montreal Executive on February 13th, a number of matters of importance were considered. A complaint from the Montreal Cotton Co., regarding delay of freight by the New York Central Railway, was sent on to the Transportation Committee. A request from the Canadian Bronze Powder Works for the abolition of the excise duty on fusel oil was referred to the Tariff Committee. Other matters discussed and specially referred to the Executive Council were Canadian bank loans in the United States, and the advisability of the boiler insurance companies employing smoke experts.

The Legislation Committee of the Branch is giving consideration to the question of revising the Municipal Code of the Province so that machinery shall not be taxable as part of a building.

Committees have already been named in connection with the September convention, and active work upon the arrangements will be commenced shortly.

British Trade Representative.

It is stated that Mr. Richard Grigg, of London, Eng., who recently made a report on British trade prospects in Canada for the home government, will shortly be appointed Canadian trade correspondent in Canada of the British Board of Trade, with headquarters in Montreal. He will have sub-correspondents throughout the Dominion, including Toronto, Winnipeg, Halifax, St. John and the Pacific coast cities.

A Proper Declaration.

The Board of Investigation which sat in the case of the Grand Trunk Railway and its telegraphers went somewhat beyond the lines set by precedent in such matters, and got into the realm of what may be called higher politics of commerce. The decision points out, what many who take part in the discussion of such issues give no heed to, that there are two parties to be considered when demands that call for higher expenditure by railways are to the fore. There is no one who questions the worker's right to a living wage, and it may be added that in the end he will get it whether the men who have invested their money in constructing railways receive any return or not. But the men who invest their money in constructing railways have also rights to consideration, whether the demand be on the part of employees for larger recompense, from the public for improved service, or from shippers or travellers for reduced rates. If any or all of such demands are carried to the point where the operation of a road yields no profit, or only yields a smaller profit than can be obtained from other investments, then it becomes difficult or impossible to obtain money for extensions and improvements, and trade cannot be helped as it should be. In pointing this out, the Board, in this particular case, has laid down a principle that may well be considered by all who are called on to stand between the public, or sections of the public, and the investor in railway securities, who, while he must take the ordinary chances of bad judgment, bad management or unexpected competition, should not be subjected to artificial restrictions or conditions arising from political or non-commercial motives.—Montreal Gazette, February 5th, 1908.

EDISON S CONCRETE HOUSE.

"I have constructed a model for a Queen Anne cottage, and next spring I intend to build a house of this pattern," says Mr. Edison, coatless and hair tousled, at his laboratory in Llewellyn Park, N.J. "I'm going to put her up in twelve hours, or try to do it—don't forget that! The expensive part of concrete construction to-day is the erection of wooden frames that can't be used again. With the aid of moulds, it is possible for any contractor to build a house of solid concrete, 25 feet wide, 45 feet deep, three storeys high, capable of housing two families, for $1,000, with plenty of room.

"The most important feature lies in the moulds, which are of iron, for the concrete is anybody's. Wooden framed complete structures are built section upon section, after each section has been allowed time to solidify. This takes an annoying lot of time, varying according to the size of the building. Concrete in the iron frame can be stripped in six days, and the forms erected on another lot.

"By pouring in concrete, which is to be hoisted to the top of the house, and dumped in from there, until the mixture fills the mould, it will be possible to complete the structure in twelve hours. Are you on?

"The forms are of cast iron, and for $1,000 the entire house can be built. This includes heating pipes of concrete, staircases of concrete, mantels of the same, roofs of concrete that won't leak, plumbing, wire conduits, and even bathtubs of concrete," he said, speaking vigorously.

"Such a house will stand forever. The houses which withstood the San Francisco disaster were concrete. Fire insurance will be a thing of the past with the new dwellings. Children may play with axes, but, chop as much as they like, they can't injure the structure. There will be no need for repairs."—Success.

BRITAIN'S SHARE OF OUR PURCHASES.

WHERE we shall buy our goods is of as great interest to us as to the manufacturing and producing countries of the world. We have, as a people, united on a national policy of buying what we can at home, but there is much which we cannot produce ourselves, and our purchases of this class of goods make Canada a market of importance to outside nations. The condition obtaining for several years was that of a steady increase in the relative amount of goods bought from the United States as compared with that bought from Great Britain. The preferential tariff stayed the decline of British sales, which have, during the past few years, shown a decided gross increase. although their percentage of our whole purchases has remained about stationary. For the year 1906 our purchases from Great Britain amounted to $69,183,915, and from the United States $168,798,376.

The existence of such conditions led the British Board of Trade to appoint a commissioner to make a thorough investigation of industrial and trade conditions in Canada, in order that the reasons for the comparatively small percentage going to Great Britain might be discovered. The commissioner, Mr. Richard Grigg, has presented his report, which is what was to be expected, a most comprehensive review of the situation, with some keen and valuable suggestions for overcoming the present conditions.

In leading up to the main subject of his report, Mr. Grigg gives a résumé of the characteristics of the market, special laws pertaining to trade and commerce, and tariff regulations. The reader is thus placed on firm footing in going into the questions surrounding the problem of imports.

For sentimental reasons, Canada would like to buy from Great Britain, but, as the Commissioner points out, this element is enough to turn the scale on an even or very slightly adverse bargain; it won't go beyond this. A number of causes favor competition from the United States, of which, of course, geographical position comes easily first. This is an advantage which it will be difficult to overcome. It operates in many ways; by enabling the salesmen to keep in close touch with the consumer; as a consequence of it the demand is for very similar goods; rapid delivery is possible; repair parts are always available; depots and distributing warehouses are kept in centres of consuming populations. Closely in line with this is the fact that many United States companies have built branch factories in this country, all of which are naturally equipped with similar machinery to that in use in the parent shop. Additions and repairs to such a plant are naturally drawn from a similar source. As was pointed out before, the habits of life of the people of this continent are very similar, and so the adaptation of goods to Canadian requirements is easily accomplished. It is a time-worn platitude, but yet unappreciated by many British manufacturers, that the manufacturer should give the consumer what he wants, not what the manufacturer thinks he ought to want. A sentence picked from the report before us illustrates what is a general ground for complaint: "English manufacturers of dry goods and underwear do not, as a rule, take sufficient trouble to produce exactly what is wanted for the market," and "the Germans are more ready to fill orders as buyers want them."

However, Mr. Grigg finds that conditions are not by any means discouraging. Great Britain has a tariff preference to overcome short hauls and small freight charges; she has sentiment in her favor; and she has a real live desire on the part of the British producers to share in the Canadian market to a greater extent than heretofore. The last of these conditions, in a way, is the most important of all, for without it other advantages would be valueless.

A striking suggestion is made that British manufacturers should consider carefully the establishment of branch factories in Canada. These would, in the majority of cases, be equipped with British machinery, they would get the home manufacturers in close touch with the market, and they would, in many cases, receive partly-finished materials from home works for completion. No doubt all of these results have followed the establishment of the numerous branches of United States factories.

The importance of fast and cheap transportation is dwelt on. It is a necessary condition to all trade. With it must be coupled the agitation for a cheaper cable service. This is now being pressed to the front, and will undoubtedly result in considerable reductions before long.

Other points of great practical importance are thoroughly discussed, among which may be mentioned the advisability of British manufacturers quoting prices and weights in Canadian standards. Mr. Grigg also urges the appointment of a number of trade representatives, to be situated in various centres of Canada.

The interest which gave rise to the appointment of a commission of enquiry, if kept up, should result in winning back to Great Britain some part of the trade which has been won from her by aggressive competitors.

NEW SYSTEM OF PRISON LABOR.

A COMMITTEE of the Ontario Legislature, which has been pursuing investigations during the intermission between the last and present sessions of the House, has brought in a report relative to prisons and prison labor. The recommendation that the Provincial prison be removed from Toronto to a country district, where five or six hundred acres of land could be secured, is in accordance with the best ideas on the treatment of criminals. Especially for first offenders the place of retention should be a reformatory, not a place of punishment.

The salvation of the situation rests in giving the inmates healthy employment. A man or boy who does a good day's work, in an occupation which demands intelligence and compels interest, is not in much danger of sinking into criminal pursuits. Such work must undoubtedly be given. Any one who has watched a group of prisoners pursuing the listless and dogged occupation of cracking stones will at once recognize how futile it is to attempt to better the moral condition of a man under such circumstances.

It may fairly be said that first offenders—and all criminals are that at some time—have offended through the result of environment, necessity or some cause exterior to themselves. The discipline resulting from compulsory work, the rousing of the mental faculties through putting up a work that will call for some thought, the interesting of the person in something which is healthy, and the eliminating as far as possible, of the usual prison features, which sap a man's self-respect, these are what are wanted to regain for the citizen-body the services of the one who is in the balance. The old method of gathering them into buildings, where offenders of every stage of criminality are assembled, where little or no work is possible, and where what is done is accomplished in a congested area, with the most objectionable environment, has been a failure. It is not a success from a moral standpoint.

The industrial aspect of the problem has also been difficult of solution. Workmen rebel against the competition of prison-made goods; manufacturers are not satisfied that individuals should be provided with cheaper labor than they can get in the free market. Many schemes have been devised for

utilizing the labor of prisoners, including that of selling it by the day, by the amount rendered as estimated by piece-work, on public works, and by selling the product to the consumer. All of these methods are objectionable in varying degrees. It has been impossible in practice to make use of prison labor without affecting injuriously the market prices of the goods manufactured. From the very nature of the labor it must be sold cheap, the cost of spoiled material is high, and for these and other reasons competition is uncertain. The rival manufacturer who has to go into the market and pay the rate of wages obtaining at the time, does not, and cannot know with any degree of accuracy, just what he is up against in the matter of competition.

The best opinion is concentrating on the farm work principle. The work, being out-of-doors and healthy, has much to recommend it; and the product of the labor has a world market, and so cannot injuriously or unfairly affect the general body of farmers. Many complaints have been made of the present system on its industrial side. The recommendation of the Committee of the Legislature is of great interest from this standpoint, in addition to its other features.

AN ALL-BRITISH CABLE SERVICE.

A cheap and efficient system of communication between the various parts of the British Empire is a necessary element in developing trade between these countries. It is almost a previous condition to such a trade. In putting forward the advantages of a complete state-owned cable system, whose termini shall be on British soil, the Ottawa Board of Trade, under the inspiring leadership of Sir Sandford Fleming, has opened up for discussion a subject which appeals no less to the man of business than to the Imperialist. It is essentially a business proposition, a means whereby commercial messages may be transmitted at a reasonable cost, which should be much less than the present rate, and without interruption, as is now unfortunately too often the case. To this must be added the advantage of the many constituent parts of the Empire being able to communicate with each other without being subject to the disabilities of using a foreign nation's service.

The idea of an all-British telegraph and cable system has been worked out to an appreciable extent in the case of the Pacific cable, to the cost of which all the colonies interested, together with Great Britain herself, contributed. The business which this cable, between Canada, New Zealand and Australia, has done during the past three years, in itself shows the need of it. Its revenues have risen from approximately $400,000 in 1903-4 to over $500,000 in 1906-7. It is noticeable that the cost of operation has increased very slightly, so that the excess of earnings over working expenses rose in the same period from $125,000 to about $275,000 per year. This would indicate that if the business could be largely increased the rate for the transmission of messages might be materially reduced.

A telegraphic system on the lines indicated by the Ottawa Board of Trade would include:—

1. A line from Great Britain to the Pacific, embracing a cable across the Atlantic and land lines through Canada.

2. A cable across the Pacific from Canada to New Zealand and Australia, with land lines across Australia to the Indian Ocean.

3. A cable from Australia across the Indian Ocean to South Africa, with a branch from Cocos Island to India.

4. A cable from Cape Town to the United Kingdom, via Ascension, the West Indies and Bermuda, with a branch to Canada.

Of these the second is an established fact. The others, it is estimated, could be established and completely equipped for an additional $25,000,000. Divided up among the many parts of the Empire interested, this would be a comparatively small sum for each unit. In return large revenue would accrue from its operation, which would go to pay, not only the running expenses, but also, to a very considerable extent, sinking funds to cover the capital expenditure.

The cordial support which has been given to the project by Sir Sandford Fleming and the Governor-General, Earl Grey, will serve to place the proposition fairly before the public.

OUR NEW ZEALAND LETTER.

WELLINGTON, Dec. 20th, 1907.

THE new Bill amending the Industrial Conciliation and Arbitration Act has been shelved for the time being. It is said that the Trades and Labor Councils are not in love with the Bill and that they have been bringing pressure to bear on the Government with the above result. Though there may be some truth in this assertion, I do not think this is the sole reason for shelving the Bill. Mr. Millar, who worked his way up from the ranks of labor, is not the man to be easily intimidated.

The Bill is considered, by impartial critics, a big improvement, and the objection of the Labor Councils seems to be principally directed against clause 53—(1) and (2), reading:

53. (1) No person shall be qualified to be a member of the commitee of management of any industrial union or industrial association, or an officer of any such union or association, unless he has been or is actually and bona fide engaged or employed in the industry in respect of which such union or association is established.

(2) Any person who acts as an officer or a member of a committee of management while disqualified under this section, shall be liable to a fine not exceeding ten pounds, to be imposed and recovered in the same manner as if such person had committed a breach of an award.

If this clause became operative it would mean the death knell of the political agitator who is ever busy to form new unions, and then gets appointed as secretary at a fixed salary. There are some of these men who act as secretary for a number of unions and whose combined salaries allow them to lead a life of comparative ease and idleness. They do not do a day's work in any of the trades represented by them.

No man knows better than Mr. Millar how baneful for the worker is the influence of the professional agitator, and he has been credited with the conception of this clause with the purpose of getting rid of these objectionable gentlemen.

The Bill will be one of the first items to be brought before the House next session, and though some think that the Bill will never come to life again, I am of opinion that Mr. Millar is determined to get the Bill on the Statute Book.

Parliament is at present homeless as the greater part of the house was burnt down last week. Happily, the library has been saved. The loss to the country is about £80,000, as the building was not insured. Steps, however, will be taken to have temporary premises erected on the same site in time for the next session.

COSMOPOLITAN.

The Londonderry Iron and Mining Company, Limited, are adding a rod and broom handle plant to their mill at Folly Lake. This new plant is now being put in, and it is expected to have it in operation in the near future. The company is also moving in other directions with a view to utilizing the entire by-product of the mill. The new department will call for the employment of several more hands.

Among the Industries

The Terrano Flooring Co. has been organized in Montreal, with a capital of one hundred thousand dollars.

The Capewell Horse Nail Co., of Toronto, have favored their friends with an attractive little calendar for the current year.

The municipality of St. Mary's will loan S. J. Doolittle, of Preston, $6,000 toward the establishment of a wood-working factory in the former town.

The Rapid Tool Co., of Peterborough, suffered a sixteen thousand dollar loss by fire recently. The stock-room, containing a large quantity of finished tools, was destroyed. The loss was pretty well covered by insurance.

The Standard Foundry & Manufacturing Co. has been organized with a capital stock of ninety-five thousand dollars. The chief place of business is Longueuil, P. Q.

The Truro Foundry & Machine Company, of Truro, N. S., has been re-organized, with a capitalization of $100,000. It is intended to extend the plant as soon as possible.

The McKinnon Dash & Metal Co., are making electric-welded coil chain in sizes up to three-eighths of an inch; also electric-welded chain for halters, traces and cow ties.

Bathurst, N. S., will be the site of the smelting works which the Drummond Mines Co. are going to erect, if suitable arrangements can be made with the municipality.

Mr. Herman Rosenberg, of New York, President of the Standard Varnish Works, New York, and of the International Varnish Works, Toronto, has been visiting the Toronto branch during the past two weeks.

Angus McIntosh, of Alexandria, has placed before the Council of Arnprior, Ont., a proposition for the establishment there of the plant of the Malleable Iron Foundry & Machine Company, which has been recently organized with a capital of $100,000.

The International Paper Co., which holds timber interests in New Brunswick valued at $4,000,000, are considering the establishment of pulp, and possibly, paper mills, in that Province. An expenditure of several hundred thousands of dollars will be made if the project is carried out.

Tolton Bros., of Guelph, have added to their farm implement factory a plant for making paper boxes. At present only ordinary paper boxes are being manufactured, but machinery is now being installed for the manufacture of collapse boxes, which will, in the future, form the major part of the output.

Financial arrangements have been completed for continuing the business of the Canadian Shipbuilding Co. Messrs. A. Berg & Sons have taken over the engine works in Toronto, and the Shipbuilding Company will concentrate its work at Bridgeburg, Ont., until such time as increased contracts will justify its resumption of business at the Toronto ship-yards.

The works of the Truro, N. S., Foundry & Machine Co., have been taken over by a new company, who are bringing in new capital, and who feel assured of a profitable business.

A company, headed by Messrs. H. Corby, M. P., and F. R. Trugham, are interested in cement clay properties near Belleville and it is reported that the largest plant in Canada will be established to develop them. The estimated cost of the cement works and lime kilns is $7,000,000.

The Stratford Manufacturing Co., which is the Canadian branch of the Goshen Manufacturing Co., of Goshen, Indiana, has completed its factory building and the installation of machinery and will commence operations at once. The Company will manufacture some farm implements, ladders, outdoor and porch furniture, etc. W. E. Swartz is the Canadian manager.

The Gould, Shapley & Muir Co., Ltd., of Brantford, have built a new warehouse 264 by 50 feet, of three storeys and a basement, a blacksmith shop 116 by 54 feet, and a galvanizing plant 100 by 54 feet. As soon as building operations are possible this Spring they will erect a new machine shop of one storey and a gallery. They are expending $70,000 on these additions and improvements.

The Canadian Fairbanks Co. have presented their friends with a serviceable calendar, which will find its way on to the walls of its recipients. Besides containing the calendar proper, in very clear and distinct type, it shows the various lines of machinery manufactured or sold by the company.

The B. Greening Wire Co.'s calendar has become almost an institution, and again we take pleasure in acknowledging the receipt of a copy. The background shows the extensive plant of the company in Hamilton, with the portraits of the founders and present head of the manufacturing plant.

The attention of all manufacturers is directed to the article "MANUFACTURERS' AGENTS," in this issue. Firms who are interested in receiving particulars of agents' enquiries are requested to forward their names to the SECRETARY, at TORONTO, specifying the lines they wish handled, and the territory or country they wish covered. Your prompt attention to this matter is desired.

BRASS PLANT.

A Birmingham (England) gentleman, who has been employed all his life in a managerial capacity in one of the large brass plants in that city, is anxious to come to Canada and open a factory here, or to take a position in one that is running now, as superintendent or manager. Knows the brass and metal working industry thoroughly and could invest £2,000 in any concern that would make a reasonable offer. His present firm, in which he is a partner, has specialized in chandeliers, gas and electrical fittings for many years, and he is thoroughly qualified to run such a department. Good references. Middle-aged. Well educated, and has a good business as well as practical experience in his trade.

Trade Enquiries

NOTE.—For further information regarding any inquiry mentioned under this heading or the names of inquiries, apply by numbers to the Secretary, at Toronto.

405 **Acids.**—A **Manchester** chemical firm asks for prices and samples of acids from Canadian manufacturers.

406 **Agricultural Implements.**—A **Derbyshire** correspondent is desirous of receiving price-lists from Canadian manufacturers of agricultural implements.

407 **Agency.**—An old-established firm in the canned goods trade is seeking the sole agency for the **United Kingdom** of a reliable Canadian exporter of canned fruit, fish or other provisions of high quality.

408 **Agency.**—A **Warsaw, Russia-Poland,** firm, who has been doing an import and export business for over twenty years, seeks agencies of first-rate firms in Canada, for the whole of Russia, especially for part of Russia, Poland, and Lithuania. Best references. Correspondence invited.

409 **Albumen.**—A **Manchester** firm asks for c.i.f. prices of blood and egg albumen.

410 **Albumen.**—A **Lancashire** chemical company asks for prices of blood and egg albumen from Canadian exporters.

411. **Asbestos Packing.**—A **Lancashire** firm wishes to correrspond with Canadian exporters of asbestos packing.

412 **Bacons, Hams, etc.—Bristol, England,** produce broker, is anxious to hear from Canadian firms who can export these lines to Bristol. Can do extensive business and has excellent references.

413 **Barrel Staves.**—A **Scotch** firm desires the names of any timber merchants in Canada with a view of obtaining prices of whole and half-barrel staves for hhd. barrels. The timber must be close grown.

414 **Bacon.**—A **South African** firm of wholesale general merchants desire to correspond with Canadian exporters of bacon, three-quarter sides, green sides, selected lean; also hams about 10 lbs.

415 **Bored Boards for Brushes, Broom Handles, Dowels, Chair Legs.**—Well-known manufacturers' agent in **London, (Eng.),** with large connection, is open to act as selling agent for Canadian manufacturers of the above lines. Can do an extensive business for regular shippers. Broom Handles to be of standard quality, 51 x 1⅛, made of basswood or pine. Dowels, ⅝ x 14½. Chair legs, maple, beech or birch, 16¾x-1½. This is a good trade opportunity and the party making the inquiry has good references.

416 **Box Boards.**—A **Manchester** firm asks for prices and sizes of box boards, such as ordinarily cut in Canadian factory, and would welcome samples.

417 **Broom Handles.**—A **Manchester** firm wishes to get prices of maple broom handles, 50 in. x 1⅛ in., from Canadian manufacturers.

418 **Brooms.**—A **South African** firm of wholesale general merchants desire to be placed in touch with Canadian manufacturers of 3-tie and 4-tie brooms.

419 **Broom and Brush Handles.**—A well-known **Birmingham, (Eng.),** firm are in the market to purchase the above handles of various sizes and qualities from Canadian manufacturers who can make regular shipments. References.

420 **Broom, Tool and Implement Handles.**—Old-established **Lancashire,** handle wholesaler, with good connections, is in the market for all kinds of handles, and is open to receive quotations from Canadian firms who can do an export business.

421 **Canned Fruit, Vegetables and Salmon.**—A **New Zealand** firm wishes to be placed in communication with Canadian canners of fruit, vegetables, and salmon.

422 **Canned Fruits, Vegetables, and Provisions.**—A **Bristol** firm desires to be placed in communication with Canadian exporters of butter, cheese, bacon, oatmeal, peas, seeds, apples, (green and evaporated), canned fruits and vegetables; also carbide of calcium, chemicals, oils, greases, sugar, syrup, etc.

423 **Canned Apples.**—A **Manchester** firm asks for prices of canned apples from Canadian exporters.

424 **Canned Fruits.**—A **Manchester** firm wishes to obtain prices of canned fruits, all varieties, from Canadian canning factories.

425 **Castings for School Desks.**—**Western Canada** manufacturing firm are in the market to purchase adjustable school desk castings from Canadian manufacturers, in quantities of 200. Member of C.M.A.; goods required immediately.

426 **Commission Agent.**—Well-known agent with good connections, of **Trieste, Austria,** desires to hear from Canadian firms who wish to extend their export business in that country. Excellent references.

427 **Calcium Carbide.**—A **London** firm is open to take large supplies of calcium carbide.

428 **Cobalt Ore.**—A **Midlands** firm wishes to purchase Canadian cobalt ore, and would like to get into communication with Canadian mine owners and shippers.

429 **Cattle Food Ingredients.**—A **Hull** firm, well known to cattle food manufacturers in all parts of **Great Britain,** especialy inquires into the prospects of securing supplies of nut husk meal, wheat screenings, and similar ingredients, low enough in price to be advantageously used in the making of cattle feeding cakes.

430 **Cheddar Cheese.**—A **South African** firm of whoesale general merchants wishes to be placed in communication with manufacturers and exporters of Canadian Cheddar cheese.

431 **Cow and Calf Hair.**—A **Hull** firm of import merchants wish to hear from exporters in Canada of cow and calf hair.

432 **Dexterine.**—A **Manchester** firm asks for c.i.f. prices of dextrine, shipped in bags containing two cwt. (224 lbs).

433 **Dressed Beef.**—Commission agent in **Antwerp, Belgium,** is open to represent Canadian beef packing houses who can do business in Europe. Good references.

434 **Dry Goods, Groceries, etc.** A general dealer of **Mosquito Cove, Burin, N.F.,** wishes to be put in communication with exporters of the following articles: Woollen and cotton goods, men's top shirts, flannelette, fleece-lined underwear, enamelled ware, leather ware, lines, twines, crockery ware, jewellery, groceries, etc.

435 **Evaporated Apples.**—An influential firm of wholesale grocers in **London,** is open to represent a first-class Canadian producer of evaporated apples for the United Kingdom and the Continent.

436 **Flour.**—A **Cardiff** firm is in a position to import large quantities of low-grade flour, and would like to hear from Canadian exporters.

437 **Flour.**—A **London** flour factor is desirous of getting into touch with Canadian exporters.

438 **Fit-ups.**—A **London** firm is open to purchase supplies of "fit-ups" suitable for umbrella sticks, in beech, birch and maple, and invites quotations (free warehouse, London), from Canadian manufacturers.

439 **Fish Oils.**—A **London** firm of import and export merchants, having a large outlet for all kinds of fish oils, desires to get into communication with Canadian manufacturers of these commodities.

440 **Handles.**—Principal of **London, England,** firm of manufacturers' agents, who will be in Canada during April and May, wishes to get in communication with manufacturers of any description of handles suitable for European market. The firm can place very large quantities, and is anxious to meet Canadian suppliers who can give regular shipments of well-graded goods.

443 **Hardware.**—Principal of a **London, Eng.,** firm of manufacturers' representatives will be in Canada during April and May, and would like to meet Canadian manufacturers of hardware and allied goods, who desire permanent representation in British Isles.

442 **Hardware.**—A firm of hardware importers in **New Zealand,** is desirous of getting into touch with Canadian exporters in this line.

443 **Hard Wheat Flour.**—A **South African** firm of wholesale general merchants wish to communicate with Canadian millers and exporters of hard wheat flour in 98 and 200-lb. sacks.

444 **Handles.**—A **Liverpool** firm asks for prices and descriptions of pick and hammer handles, from Canadian manufacturers.

445 **Linseed Oil Cake, Corn Oil, Corn Starch.—Antwerp, Belgium,** commission merchant, of excellent standing and wide connections, is in a position to place large orders for the above products for Canadian firms who can export in large quantities. Will act as exclusive agent for any firm desiring his services. Good references and long experience.

446 **Manufacturers' Agent.**—One of the best known representatives of **Canadian** manufacturing establishments in **London, England,** who has had long experience in handling Canadian goods, and has established a wide connection, will visit Canada in April and May, with the purpose of forming additional Canadian connections. Will be pleased to call on any firms who desire him to do so. Firms interested in this inquiry should write the Secretary, as the inquirer will call at this office for the purpose of securing addresses.

447 **Manufacturers' Representative.**—A **Canadian,** who has had several years' experience in **Mexico and the West Indies,** as a representative of Canadian manufacturers, has a good proposal to submit to Canadian firms who are interested in those markets. Has had wide experience and will be able to do good business.

448 **Packing Paper.**—A **Birmingham** firm, using all kinds of packing paper, is prepared to purchase from Canadian exporters.

449 **Paraffin Matches.**—A **North of Ireland** firm desires to import supplies of paraffin matches from Canada.

450 **Paraffin Wax.**—A **Manchester** firm asks for prices of paraffin wax from Canadian exporters.

451 **Printing Presses, Inks, Papers, etc.**—Well-known firm of wholesale dealers in **North India,** are anxious to receive catalogues, price-lists, etc., from Canadian manufacturers, who can export the above lines to India. References.

452 **Pine Sidings.**—A **Lancashire** firm will welcome prices of pine sidings, first, second, and third quality, from Canadian exporters.

453 **Provisions, etc.**—A correspondent in **Glasgow,** stated to have a connection with buyers of grain, flour, and provision, desires to represent Canadian exporters of these lines.

454 **Produce.**—Inquiry has been received from a firm of merchants in **London,** for the names of exporters of Canadian produce. They are willing either to purchase or to act as agents on commission for packers and shippers.

455 **Pulp Wood.**—A **Manchester** firm with extensive connections, wishes to correspond with Canadian exporters of pulp-wood.

456 **Pulverized Charcoal.**—A **Manchester** firm asks for samples and prices of pulverized charcoal.

457 **Pulps.**—A **London** firm, already receiving large quantities of fruit pulp from other markets, is desirous of obtaining supplies of Canadian raspberry and other pulps for sale, on commission.

458 **Purchasing Agent.**—Well-known manufacturers' agent, of **Trinidad, B.W.I.,** will be pleased to act as purchasing agent for Canadian rolling mills, who are looking for supplies of old iron and other metals. Claims to have excellent facilities for doing this class of business.

459 **Provisions.**—A **Welsh** firm desires to obtain the agency for Canadian exporters of bacon, hams and other provisions.

460 **Maple Blocks.**—A **Midlands** company is open to purchase supplies of maple last blocks, and invites quotations in carload lots, from Canadian manufacturers.

461 **Mica.**—A **Manchester** firm asks for samples and prices of mica, from Canadian exporters.

462 **Representation.**—A well-established firm in **London,** having agents in various parts of the world, is anxious to get into touch with Canadian manufacturers of wood-pulp, who require representation.

463 **Rags.**—A **North of England** firm is desirous of being placed in touch with exporters of Canadian rags.

464 **Representative.**—An **Irish** firm desire to represent one or two first-class firms of Canadian shippers and lumber manufacturers. They desire to make contracts for parcels and cargoes for waney and white pine timber, red pine, spruce, and pine deals, boards, floorings, etc. The Irish firm referred to is an old-established firm who will give bankers' references.

465 **Riddle Rims.**—A **West Bromwich** firm wishes to purchase riddle rims.

466 **Rice Flour and Splie Peas.**—A **Bristol, England,** produce broker is in the market to purchase the above products from Canadian exporters. Will act as exclusive agent if desired. Good references and connections.

467 **Salmon.**—A firm in the **North of England,** dealing extensively in imported fish, is desirous of securing direct supplies of either frozen or fresh salmon from Canada, such as "Loggerbrands," etc., and inquires for exporters who are open to take an interest in the enterprise.

468 **Salmon.**—A **South African** firm of wholesale general merchants desire to correspond with Canadian exporters of full red Alaska salmon in 1-lb. tall tins; also salmon equal to Lazenby's in 1-b. and 1-2-lb. flat tins.

469 **Salmon.**—A **Leeds** wholesale fish firm is desirous of communicating with Canadian fish exporters with a view to arranging for direct shipments of "Loggerbrands" Sockeys, and other kinds of salmon.

470 **Slaughterers' by-products.**—A **London** firm desire to be placed in communication with Canadian meat-packers for the purchase of slaughterers' by-products. Particulars of requirements can be had at the Department of Trade and Commerce.

471 **Shovels, Spades, Picks, Axes.—Winnipeg** firm of manufacturers' agents is open to receive quotations for wholesale orders of the above lines. Will sell on commission, quotations to be f.o.b. factory. Payment as agreed upon. References Dunn's and Bradstreet's.

472 **Split Peas.**—A **Manchester** firm is open to buy large quantities of split peas from Canadian shippers.

473 **Steel Box Strapping.**—New York firm of export agents are anxious to get in touch with Canadian manufacturers of steel box strapping.

474 **Timber.**—A **Dutch** firm is desirous of getting into touch with Canadian exporters of timber.

475 **Tools.**—A **Manchester** firm asks for prices and description of machine tools from Canadian manufacturers.

476 **Washboards, etc.**—Inquiry has been received from an English firm for the names of Canadian exporters of washboards, broom-handles, etc.

Duty on Catalogues.

In reply to an inquiry respecting the duty on catalogues or on advertising matter sent to Australia, Mr. J. S. Larke writes as follows: The duty at present is 6d. per lb. But there is a possibility that it will be changed before the tariff finally passes. I have made an application to the Department of Customs of the Commonwealth that should there be a duty fixed upon advertising matter, an arrangement may be made, that when mailed in Canada there shall be a provision whereby the duty could be pre-paid there. I am given to understand that the matter is under consideration. I hope that a special duty stamp may be provided which could be sold in Canada and affixed to the documents when mailed.

The duty on printed matter in New Zealand is 3d. per lb. But there is an important and liberal exception whereby it is declared that this duty shall not apply to trade catalogues or price lists of the goods of firms or persons having no established business in New Zealand. It will be seen, therefore, that there is no difficulty in sending such matter to New Zealand. If the Canadian firm has an established house, the matter should be addressed to it and it would pay the duty. But if it has none, no duty will be levied.

Will Advertise the Country.

Members of the National Editorial Association of the United States, following their convention in St. Paul next summer, will visit Winnipeg, and from there will make a trip to the Canadian Rockies. The country they will pass through on such an excursion, especially during August, when the wheat lands are reaching their full growth, should inspire the editors with subjects for "copy" for the coming year, all of which will help to direct the attention of the thrifty farmers of the Republic to the greater advantages of Canada.

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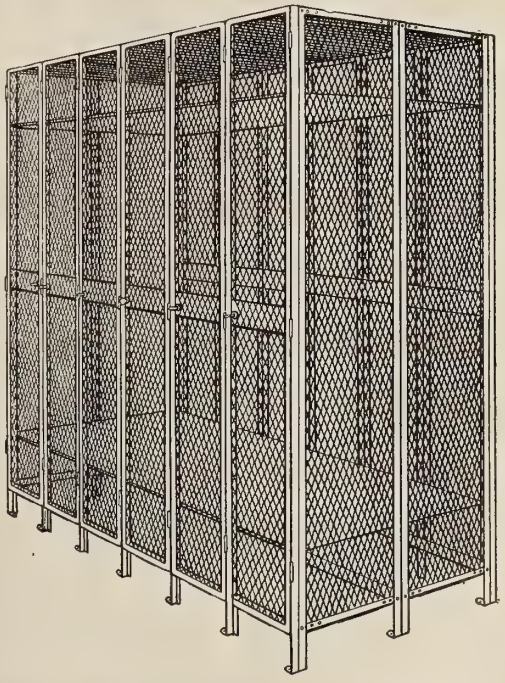
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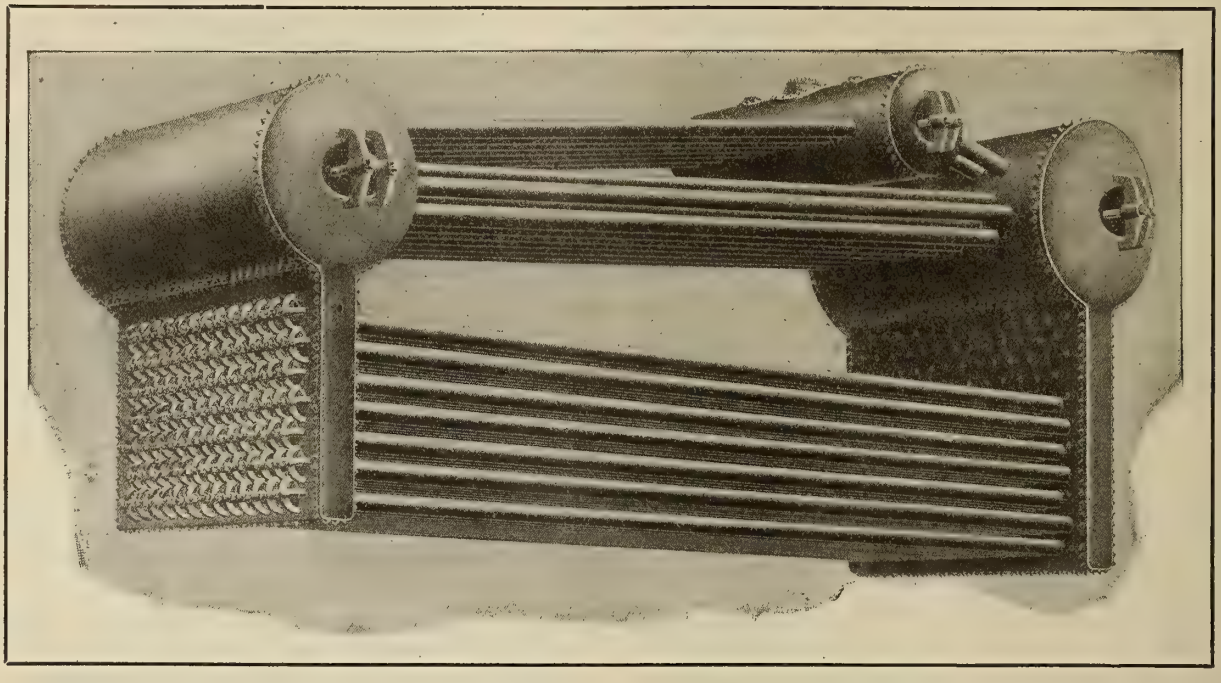
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See Bulletin No. 32

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Head Office and Works, TORONTO, ONT.

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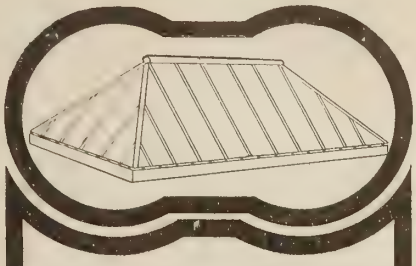
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OF ALL KINDS

(20 Years' Experience to guide us in our work).



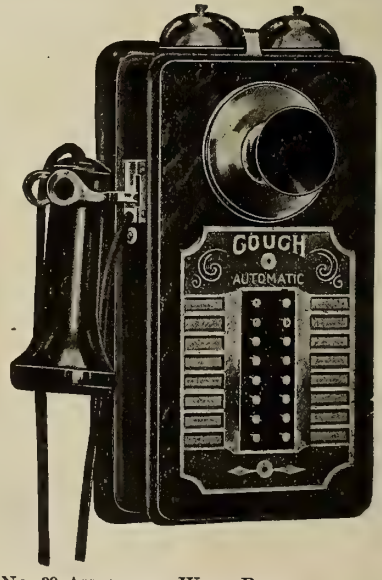
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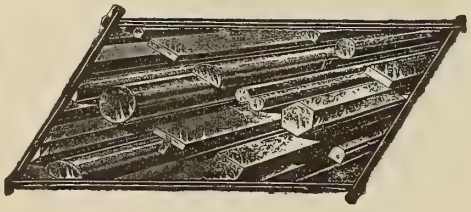
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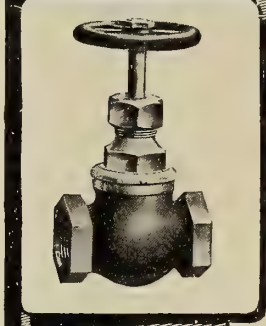
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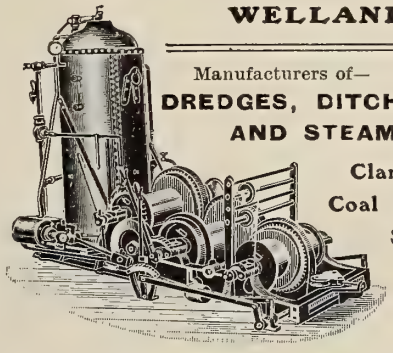
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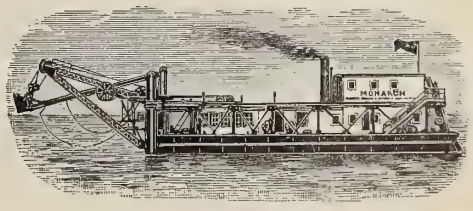


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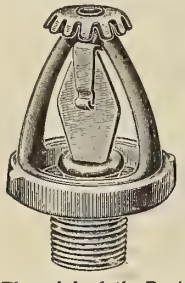
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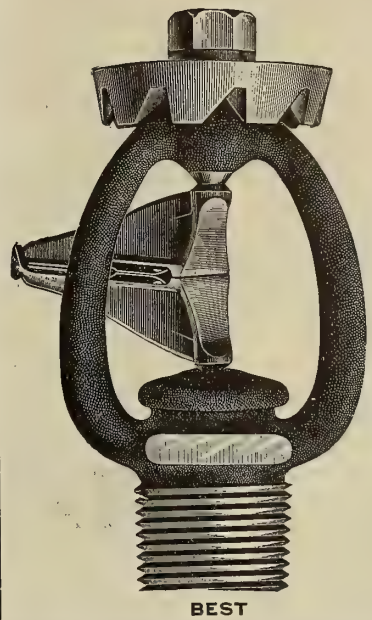


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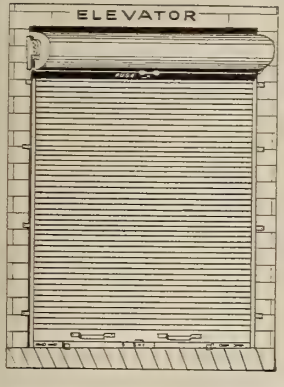
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AUTOMATIC HEAT CLOSING FOR ENCLOSING ELEVATOR OPENINGS, SHIPPING DOORS, Etc.

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automatically straighten and cut off accurately any lengths up to 6 feet, sizes of wire No. 14 to 7 gauge.

These machines are in good order and do perfect work. We have three to spare and will sell one or more as desired. Price, complete with counter shaft, $75.00 each.

Also have some good nail machines which we will tell you about if interested.

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For several months the people have been economising; stocks are low; they cannot put off buying much longer. As was shown in annual statement,

The Mail and Empire.

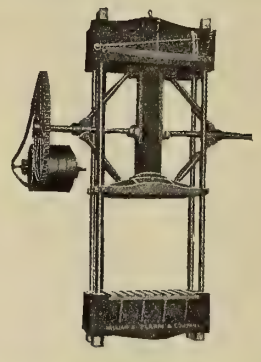
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Executive Council

FEBRUARY MEETING.

The regular monthly meeting of the Executive Council was held in the Council Chamber of the Board of Trade, Toronto, on Thursday, February 20th, at 2 p.m.

The Honorable J. D. Rolland presided, and there were also present: G. Frank Beer, Toronto; George Booth, Toronto; W. R. Dunn, Hamilton; L. V. Dusseau, Toronto; J. F. Ellis, Toronto; John Firstbrook, Toronto; Atwell Fleming, Toronto; George D. Forbes, Hespeler; Ed. Freyseng, Toronto; W. M. Gartshore, London; R. S. Gourlay, Toronto; Sam Harris, Toronto; S. R. Hart, Toronto; D. G. Henderson, Windsor; J. Hewton, Kingston; Alf. Jephcott, Toronto; Hugh C. MacLean, Winnipeg; J. B. MacLean, Toronto; J. S. McKinnon, Toronto; Robert McLaughlin, Oshawa; J. P. Murray, Toronto; A. Nordheimer, Toronto; W. C. Phillips, Toronto; J. Ransford, Clinton; W. H. Rowley, Hull; J. H. Sherrard, Montreal; J. O. Thorn, Toronto; W. B. Tindall, Toronto; and Dan Wilson, Collingwood.

The minutes of the January meeting as published in INDUSTRIAL CANADA were taken as read.

COMMUNICATIONS.

Communications were reported as follows:

1. From the following members of the Executive Council, regretting their inability to be present: R. Thomson, S. W. Ewing, R. J. Younge, Wm. Stone, Wm. Robins, Louis Simpson, H. Stroud, Robert Munro, C. R. McCullough, C. H. Waterous.

2. From the Secretary of the Ottawa Board of Trade, inviting the attention of the members of the Association to their campaign in favor of an Imperial cable service to girdle the globe. Referred to the Commercial Intelligence Committee.

3. From the Montreal Executive, suggesting the desirability of interviewing the different Boiler Insurance Companies with a view to inducing them to add to their organization a department for the purpose of advising their clients regarding smoke consumption. It was decided that this communication should be tabled.

4. From the British Board of Trade, thanking the Association for the assistance it had given Mr. Richard Grigg in connection with his recent commercial investigations in Canada.

The Association officers and committees then reported as follows:

PRESIDENT.

The President stated that he had visited the Quebec branch since the January Executive, and hoped to meet them again after the opening of the Quebec Legislature at a general meeting, when he would like to have the Secretary, and the Managers of the Insurance and Transportation Departments present if possible.

TREASURER.

The Treasurer, Mr. Booth, presented his statement, showing receipts for the month of $3,637.81, and disbursements of $3,561.68, leaving a balance on hand of $15,147.02. He pointed out that for the first six months of the present year the Association's expenses were $3,000 more than for the corresponding period of last year. If new work were to be undertaken the expense could not be met out of current revenue, but would have to be financed temporarily, at least, from the surplus.

FINANCE.

The report of the Finance Committee was read by the Vice-Chairman, Mr. W. B. Tindall. It recommended for payment the accounts for the month, totalling $1,665.65.

Travelling Expenses of Members.

Touching on the above matter, which was referred back to the Committee at the January meeting of the Executive, report was made as follows:

With reference to the payment of travelling expenses incurred by members when engaged on Association business, this Committee desires to record its opinion that the practice is one which should not be encouraged. Every manufacturer joining the Association should feel under obligations to do something more towards furthering its aims than the contribution of his annual fee, and, as a matter of fact, a great many do. With some it consists in the giving of valuable time to the work of committees, and with others it consists in travelling long distances to be present at the monthly meetings of the Executive Council. The man who comes from Montreal to Toronto purposely to give the Association the benefit of his advice on the matters engaging its attention, is, in a way, just as much entitled to compensation as the man who goes from Toronto to Ottawa to transact departmental business for the Association. The former does not expect to have his expenses paid, and the latter, as a rule, should not ask it.

If he be an honorary officer, we feel there is all the more reason why he should not ask it. The man who accepts the chairmanship of a committee accepts thereby responsibilities far exceeding those attaching to a private member, and it should be as much his duty to perform the Association's work when it involves a little travelling as it is to do that work when it simply involves attendance at committee meetings.

It is recognized, however, that there are sometimes exceptional cases, where the circumstances are such that it becomes the duty of the Association to reimburse members who have been put to expense on its account, and we would suggest that the Secretary report all such cases in the first instance to the Committee having charge of the matter in connection with which the expense was incurred, whose approval must be obtained before the account can be considered by the Finance Committee.

The report further recommended:

1. The re-engagement of Mr. E. P. Heaton as Manager of the Insurance Department for another year, with permission for him to act as Consulting Underwriter for the Central Canada and Eastern Canada Manufacturers' Mutual Fire Insurance Companies.

2. The appropriation of $5,000 for the purpose of creating a Tariff Department for a period of one year, as referred to in the report of the Tariff Committee.

3. That permission be given the Treasurer to invest another $5,000 in first-class securities.

In answer to a question raised by Mr. McLaughlin as to how the $5,000 for the Tariff Department was to be spent, Mr. Tindall stated that the idea was to obtain the services of an expert tariff officer who would handle the tariff grievances raised by members of the Association in a thoroughly practical and scientific manner. After reciting in some detail the duties which would be expected of this officer, Mr. Tindall stated that it was felt that he would have to be paid

$2,500 a year. The balance of the appropriation would be used up in travelling expenses, rent, office assistance, and general expense. The Committee realized that the money would have to come out of the Association's surplus, but there was ample on hand to justify the experiment for one year.

Mr. Murray, Mr. McLaughlin, and Mr. Booth also spoke in favor of the proposition, after which the adoption of the report was carried.

INSURANCE.

On behalf of the Insurance Committee, the Chairman, Mr. Alfred Jephcott, stated that he had no formal report to make. Since the Hamilton meeting the Committee had been carrying out instructions with regard to the circulation of its report on the new Insurance Bill, and it was now proposed to mail a copy of it, not only to every member of the Council, but to every member of the Association.

His Committee was pleased to recommend the re-engagement of Mr. Heaton, whose excellent work during the past year spoke for itself.

RAILWAY TRANSPORTATION.

The Manager of the Transportation Department, Mr. Walsh, presented the report of his Committee, as follows:

Improvement of Water-ways.

In our last report to the Executive this matter was referred to, but on motion the whole clause was eliminated. Your Committee are of the impression that it was not the intention of the Executive to eliminate the whole clause, but rather that portion of it which dealt with local agitations which might lead to sectional differences. There has been no intention of dealing in the matter other than in a broad manner, that is, without any reference to local conditions. Your Committee, therefore, would like to know whether it is the desire of the Executive that no future reference should be made to this matter or whether they have any instructions to give on the subject.

Flag Stations.

Your Committee has received a report from the Board of Railway Commissioners in reference to the handling of freight at flag stations. This is in the form of a recommendation, to which we are advised the railways have taken exception. Copies have been sent to the Secretaries of the Manitoba and Vancouver branches for their consideration.

Interswitching.

An opinion from the Board of Railway Commissioners and report from the Chief Traffic Officer have been received. The report recommends a reduction of 50 per cent. in the switching charges on what is termed "non-competitive traffic."

Bill of Lading.

An effort is being made to have a committee appointed at an early date to consider the terms and conditions for the new bill of lading. Shippers generally, are united in this matter, the only body which seems inclined to take individual action being the Canadian Bankers' Association. That Association, however, has assured us that their main contention will be that when a through bill of lading has been given to a shipper the carrier cannot be relieved of his responsibility until delivery. This is in accord with the views taken by the Association. The Manager was instructed to consult with some of the other principal bodies interested with a view of employing counsel jointly when the question is taken up.

Referring to the improvement of waterways, Mr. Henderson stated that he did not think it was the wish of the Council at the January meeting, to forbid the Committee giving further consideration to the question in its broader aspects; that all it was expected of them was that they would avoid entangling the Association by endorsing schemes that were largely local or sectional in character. He accordingly moved, seconded by Mr. Firstbrook, that the Transportation Committee be empowered to continue their studies of the improvement to waterways in general, and to report thereon to the Executive Council.—Carried.

PARLIAMENTARY.

In the absence of the Chairman, the report of the Parliamentary Committee was presented by the Secretary. It read as follows :

Foreign Loans by Canadian Banks.

A letter has been received from the Executive Committee of the Montreal branch, calling attention to the practice of Canadian banks in keeping large sums of money loaned on call in the United States, and asking that consideration be given to the effect of this practice on Canadian industries. Your Committee feel that while investments in or loans to Mexican and South American enterprises on the part of Canadians ought to be discouraged, as long as there is so great a need of capital in our own country, it would be unwise to press for any amendment to the Bank Act which would prevent our banks from loaning money on call in New York. It so happens that this Act will come up for renewal in a few years, and it is suggested that the Association make a study of the question in the meantime, with a view to gaining as much information as possible.

Bribing Employees to Effect Sales.

The Association has been asked to consider the advisability of promoting a bill similar to the one in England, making it a criminal offence to bribe an employee with the object of getting his good-will in the sale of merchandise. There is no doubt that the practice is very generally resorted to, and that anything which could be done to put a stop to it would be a step in the right direction. Copies of the English bill will be procured, and the matter will be reported on at a later meeting.

Franchise for Incorporated Companies.

Instructions have been given the Association's solicitor to draft a bill which will give Incorporated Companies a vote on money by-laws. The subject is a very much more complicated one than originally supposed, and will require an amendment to three Acts, the Assessment Act, the Voters' List Act, and the Municipal Act.

At the request of the tanners in the Province of Quebec, an effort is being made to secure support from the tanners of Ontario for a Bill to amend the general Inspection Act, so as to provide for the compulsory inspection of green hides.

The City Architect, Toronto, has drafted a By-law providing for the compulsory inspection of elevators within the city. Your Committee believe that this is properly a matter which should come under the jurisdiction of the Provincial Government, as it involves the principle of liability for accidents happening on elevators that have passed inspection; further, it may clash with the inspection of the Insurance Companies carrying risks on the elevators. If the By-law is brought forward it is likely that it will be opposed on these grounds.

Mr. Rowley thought the Committee was not in possession of full information regarding the right of incorporated companies in the other Provinces to vote on money by-laws, stating that his company always had a vote in Hull. He considered it an injustice that he had to pay taxes in Ontario when he earned his income in the Province of Quebec. He also expressed the opinion that some reciprocal arrangement

ought to be entered into among the Provinces with reference to succession duties.

Mr. Henderson thought the Committee should make a strong protest against those clauses in the Assessment Act which made it necessary, first, for officers of incorporated companies paying a business tax, who were shareholders of those companies, to pay an income tax on their salaries, and second, for employers to give information regarding the wages paid their employees.

Mr. Thorn explained, on behalf of the Committee, that they had not been idle so far as the Assessment Act was concerned, as they had more than once introduced bills to bring the business assessment for manufacturers down from 60 to 50 per cent., and to exempt officers, who were also shareholders in incorporated companies, from the income tax on their salaries. Another effort was being made this year, and the necessary bills were being looked after by Mr. McNaught. He felt, however, that the manufacturers should not object to giving information regarding the wages of their employees.

RECEPTION AND MEMBERSHIP.

The report of the Reception and Membership Committee recommended the acceptance of fifteen applications:

HAMILTON, ONT.—Wm. Lees & Son.—Biscuits and Confectionery.
Thornton & Douglas, Ltd.—Clothing.
The Haskins Wine Co.—Wine.
I. Blumenstiel.—Cigars.
Canadian Meter Co. Limited.—Gas meters.
Berlin Machine Works.—Machinery.
KINGSTON, ONT.
S. Anglin & Co.—Sash and Doors.
MOORETOWN, ONT.
The Western Salt Co., Ltd.—Salt.
MONTREAL, QUE.
John W. Peck & Co., Ltd.—Clothing.
OTTAWA, ONT.
International Marine Signal Co., Ltd.—Gas buoys.
TORONTO, ONT.
Dominion Envelope Co., Ltd.—Envelopes.
Bawden Machine & Tool Co.—Machinery.
Whitworth & Restall.—Mattresses and Bedding.
William Neilson, Ltd.—Ice Cream.
WINNIPEG, MAN.
Sherwin-Williams Co., W. S. Follis, second member.—Paints.

Continuing, the report read as follows:

Montreal Meeting.

It will be remembered that the Committee's recommendation last month, that the March meeting of the Council be held in Montreal, was held over for further consideration. In bringing the matter up again your Committee wishes to state that it still believes that the best interests of the Association will be served by accepting the invitation of the Montreal branch.

Bronze Plate for Commercial Club.

A suggestion has been made by the President that a bronze plate with a suitable inscription be donated to the Commercial Club, Hamilton, to commemorate its opening on September 27th last, when the visiting members of the Association were so splendidly entertained. Your Committee feels that the suggestion is a most happy one, and it is recommended that it be acted upon at once.

In adopting the report, the Council decided that a tablet should also be given to the Royal Alexandra Hotel, Winnipeg, to commemorate its formal opening, by the Convention of 1906.

COMMERCIAL INTELLIGENCE.

The following are the principal matters referred to in the report of the Commercial Intelligence Committee:

Manufacturers' Association of Great Britain.

The Secretary of the above organization writes our Association that he will visit Canada in June next for the purpose of looking into the possibilities of increasing British trade with Canada, the advantages to be derived from establishing branch factories here, the extent and condition of local industries, the operation of the Canadian tariffs and the preference, as well as other matters. The Secretary has been instructed to afford the writer every assistance in his power.

Franco-British Exhibition.

A limited amount of space is still available in the Canadian Government Building now being erected on the grounds of the Entente Cordiale Exhibition, London, and manufacturers desiring to send displays are urged to communicate at once with the Secretary of the Exhibition Branch, Department of Agriculture, Ottawa. All displays accepted will be taken entire charge of by the Government without expense to the manufacturer, and returned at the close of the Exhibition free of cost, or will be sold in London, at the pleasure of the owner.

Commercial Reports and Translations.

Since the office has begun to advertise its facilities for procuring Commercial Reports and for translating correspondence members have been making far greater use of its services. During December, 1906, and January, 1907, only three orders were received for reports, as against 12 for December, 1907, and January, 1908, while the translations made in the same two periods jumped from 2 to 87. Since the translator was engaged on a monthly basis, 44 different firms have sent in work, showing that the service is being widely appreciated.

Fraudulent Use of the Mails.

From information furnished by the Association, the Post Office Department has been able to suppress an attempt to defraud the public by obtaining subscriptions at $10 each for a fictitious publication described as the "*Official Pink Book of Canada.*" It purported to be a directory of Canadian manufacturers, containing over 14,000 names and 650 pages of classification. Your Committee wishes to state in this connection that if members generally would make a point of reporting promptly all questionable or fraudulent schemes which come to their attention, prompt steps could be taken to bring about their suppression, thus affording our membership an additional measure of protection.

"INDUSTRIAL CANADA."

The report of the INDUSTRIAL CANADA Committee, as read by Mr. Hart, referred with regret to the fact that the finances of the paper were not in as flourishing a condition as they were some months ago. This was accounted for partly by the general business depression, but more particularly by the higher cost of printing, the increase in the amount paid in salaries, owing to additions to the staff, and the loss of business arising from the fact that the paper was for months without an advertising solicitor. It was believed, however, that things were now on the mend and immediate improvement was looked for.

The report of advertising showed a net gain of $738 for the preceding three months.

Mr. Harris complimented the Committee on the interesting character of the editorials it was printing, stating that he believed its efforts in this direction were widely appreciated.

TARIFF.

The following are the more important matters referred to in the report of the Tariff Committee:

Cement for Detroit Tunnel.

Your Committee is advised that large quantities of United States cement are being used in connection with the construction of the tunnel connecting Detroit and Windsor. It appears that it is admitted free of duty. The Department justifies its action by quoting section 596 of the Customs Tariff, whereby material used in Canada for the construction of bridges and tunnels crossing the boundary are admitted free of duty when similar materials used under similar circumstances are admitted free into the United States.

While the arrangement would seem on the face of it to be a reasonable one, it cannot be doubted that if, under it, any considerable quantity of Canadian goods were being used on the United States side, the authorities of that country would soon find some means of putting a stop to their free importation on technical grounds. In the opinion of your Committee the arrangement is all in favor of the United States, and furnishes another example of the manner in which Canadian interests are neglected.

Leeway in Dumping Regulations.

(a) 5% Clause.—

Acting under instructions from the Council, the Secretary has communicated with representative engine and boiler makers on the one hand, and rolling mill men on the other, to see if it would be mutually satisfactory to press for the abolition of the leeway on all articles of iron and steel other than channels, beams and sheets. To this the rolling mill men have assented, but the bridge builders and boiler makers still object. It has been suggested that a compromise might be reached by further excepting angles, plates and bars, and interested parties are now being sounded on this new proposition.

(b) 7½% Clause.—

Following the Council's decision at its Ottawa meeting, the Minister of Customs was advised of the Association's wishes regarding the abolition of the 7½ per cent. leeway. The Secretary was informed by the Minister under date January 24th, that the matter had had careful consideration, but that his Department did not see its way clear at the present time to abolish the allowance referred to. He stated that without this leeway certain rules of trade by exporters from foreign countries with reference to freight allowances, etc., might bear unfairly on some dealers in a country as large as Canada; moreover, that it would be very difficult for the Department to administer the law with reference to the special duty clause if the leeway were abolished.

Establishment of Tariff Department.

Your Committee has again had this important matter under consideration, and has decided to ask the Finance Committee for an appropriation of $5,000 to carry on the work for the first year. It is believed that this estimate is the very lowest amount for which the work could be done. Ultimately it may involve an increase in the annual membership fee, but the amount asked for will enable the work to be continued until after the Annual Meeting, by which time it will be seen, to some extent at least, whether the Department is going to be of permanent service; if so, the method of financing it can then be definitely decided upon.

Franco-Canadian Treaty.

In view of the stand taken by the Association in January, 1907, with reference to the Intermediate Tariff, and further, in view of the fact that it was quite impossible to tell what the ultimate effect might be of extending to some thirty other countries the concessions extended to France under the new treaty, it was strongly recommended by the Committee that the Association maintain a neutral attitude while the above matter was under discussion in the House.

Speaking on that clause of the report recommending the establishment of a Tariff Department, Mr. Rowley thought it was a mistake to proceed on the assumption that the Department might only be operated for one year. He believed it would be impossible to find a man who would take the position for a year. The Committee must therefore try to devise means of making the position permanent. The work to be done was of an exceptional character, so exceptional, in fact, that there were very few men in Canada who could qualify for it. Those men were probably already in good positions and they would not think of making a change unless it were for a long engagement.

Mr. Tindall stated that the Committee was fully seized of the importance of this point, but they did not like to engage any man for more than one year, that being the rule always followed in Association appointments. If the proper man were secured, he felt that he would make himself so valuable to the Association that he could not be dispensed with. It rested very largely with the man himself as to whether or not the position would be permanent.

There being no motion before the meeting on this point, the report was adopted as presented.

NEW BUSINESS.

Under the above heading, Mr. Thorn referred to the visit of the Hon. James Bryce, to Ottawa, for the purpose of securing the consent of the Canadian Government to an international treaty, which proposed, among other things, to restrict the development of power on the Canadian side of the Niagara frontier, to the amount specified in the charters already granted. For a number of reasons, which he proceeded to lay before the meeting, Mr. Thorn thought that such a treaty if ratified would be fatal to the industrial interests of Ontario. He accordingly moved, seconded by Mr. Hart, that Sir Wilfrid Laurier be advised by telegram that the Executive Council wished to express the hope that in any treaty to which the Dominion Government might give assent nothing would be done that would in any way restrict the production of electrical energy on the Canadian side of the Niagara frontier.—Carried.

BRANCHES.

The reports of the Montreal and Toronto Branches, as read by Mr. Sherrard and Mr. Freyseng, respectively, were both received, and will be found elsewhere.

On behalf of the Institute of Chartered Accountants, Mr. Tindall extended a cordial invitation to all members to attend the meeting on the 21st, when Mr. Mulvey, the Assistant Provincial Secretary, was to speak on the Company Law of Ontario.

The meeting then adjourned.

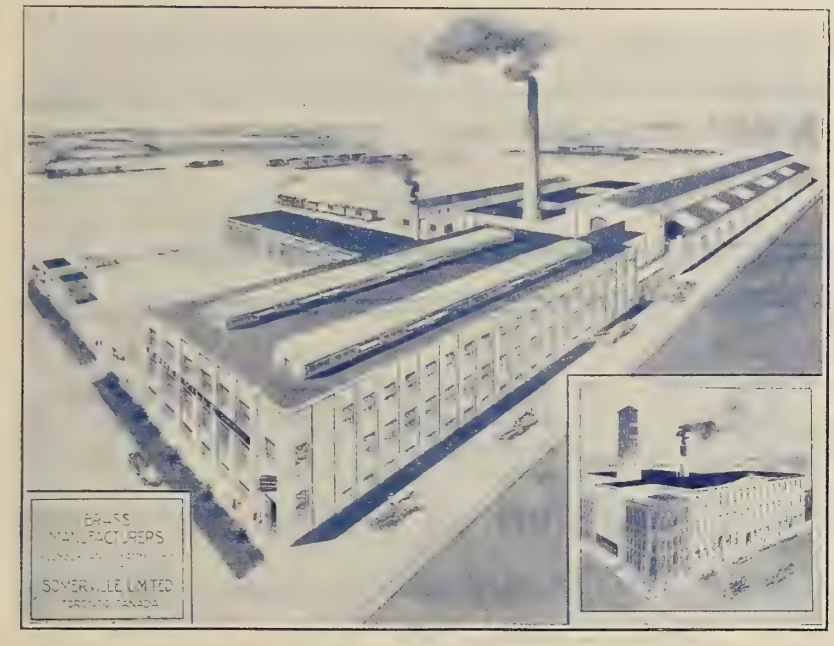
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Vol. VIII. No. 9 APRIL, 1908 $1.00 per year

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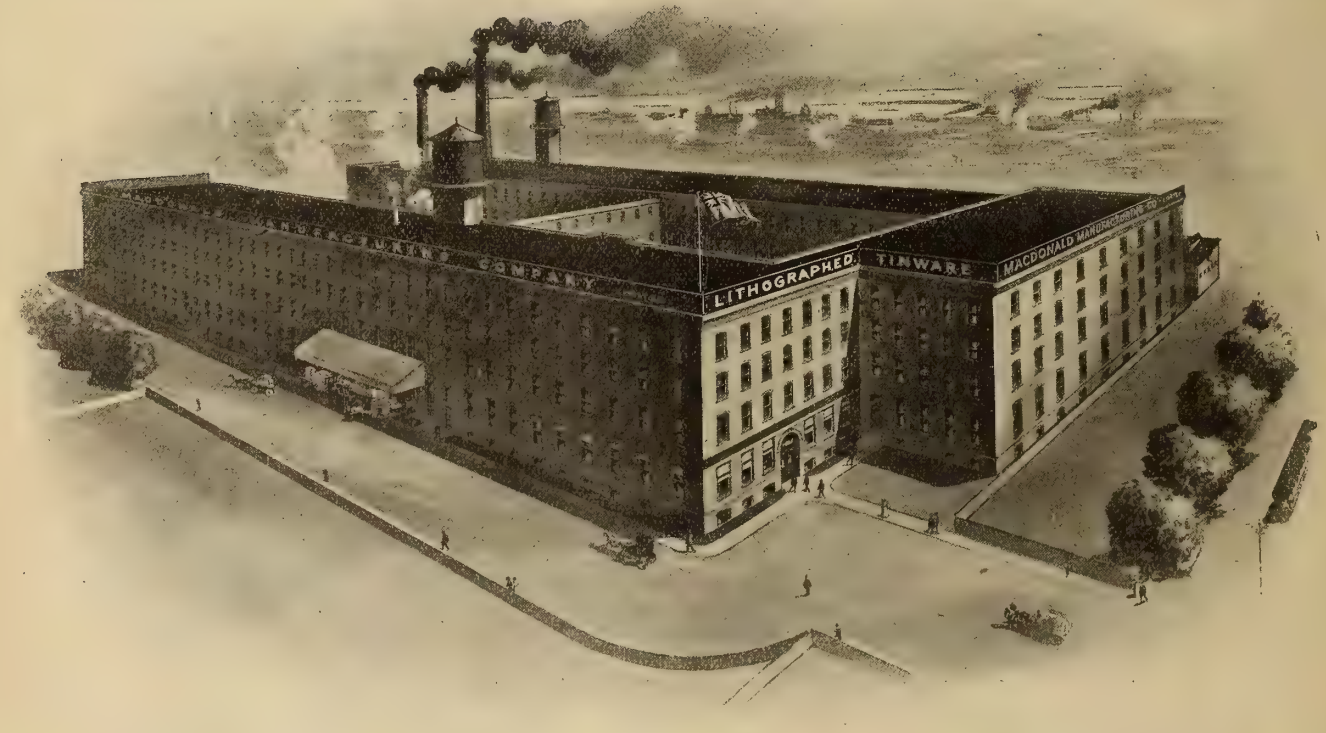
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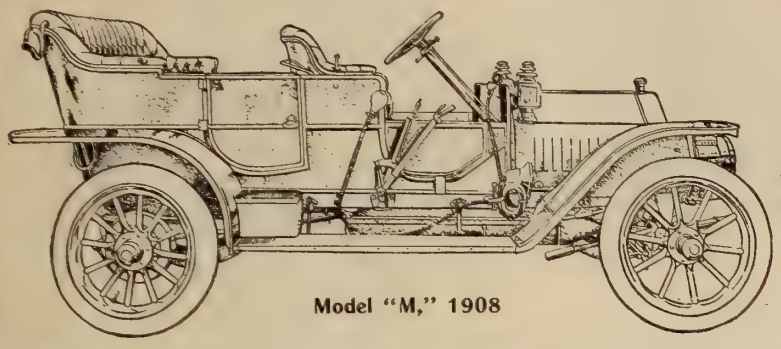


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What investment can you make that will yield you the positive dividends in **Health, Happiness** and **Comfort** that an

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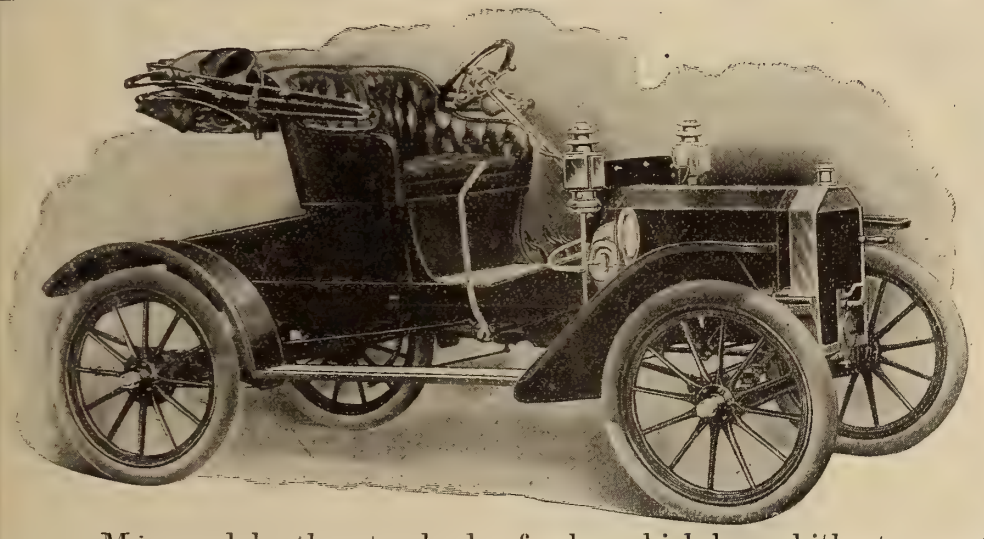
will bring to you and your family?

IT is the Everyday, Year-in-and-year-out Service which makes the OLDSMOBILE a necessity to so many modern homes. Then, too, there's a lot of satisfaction in knowing that the car in which you invest is standardized—that it will be style this year, and for years to come.

Model "M," shown above, is the Ideal Family Service Car—Powerful, Simple and, above all, Comfortable. A car as much at home on the muddy country road as on the city pavement—distinctly a car for everyday Service. Send for our catalog.

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Whenever a prospective buyer examines a Ford Car the first question that occurs to him is, how we can give so much automobile for the money.

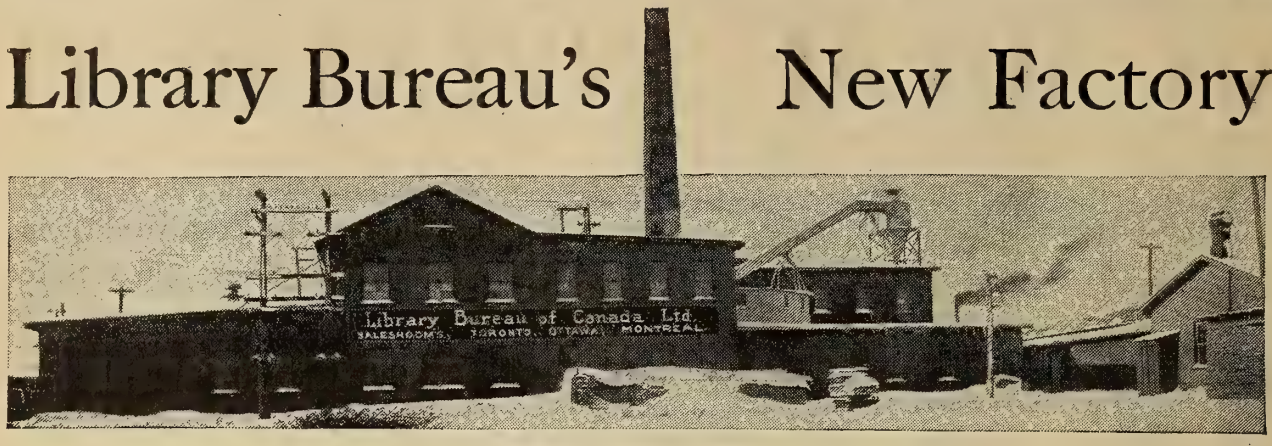
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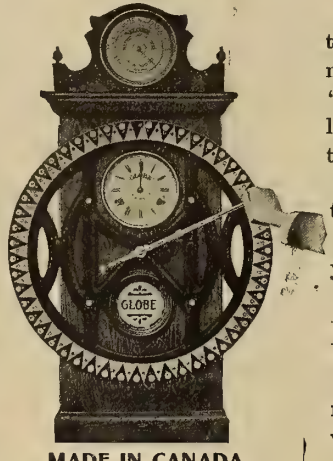
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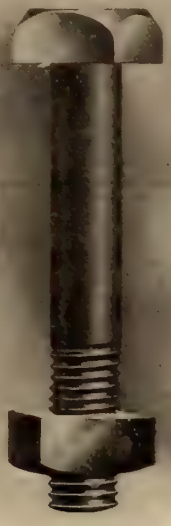
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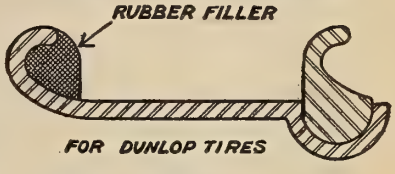
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The Dunlop "Universal" Rim is acknowledged to be the most practical and most simple of any invention in its class.

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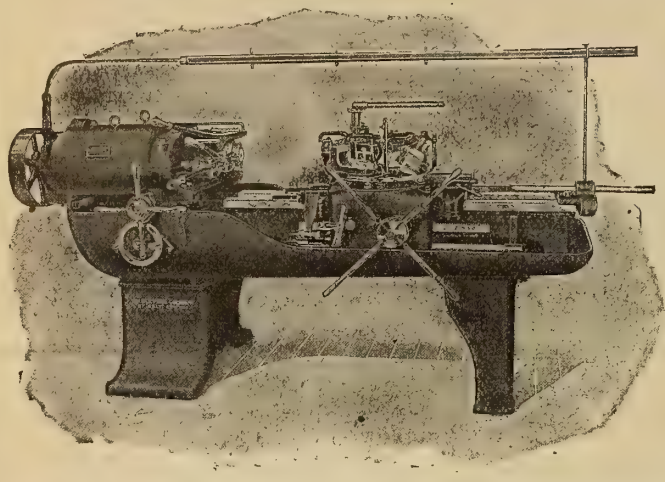
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Workmanship the very highest. All the features of the United States machine, together with many desirable additions of our own. The Flat Turret Lathe is now recognized as indispensible in all machine shops, it being a REMARKABLE PROFIT-MAKER.

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ASK FOR CATALOGUE DESCRIBING THIS MACHINE

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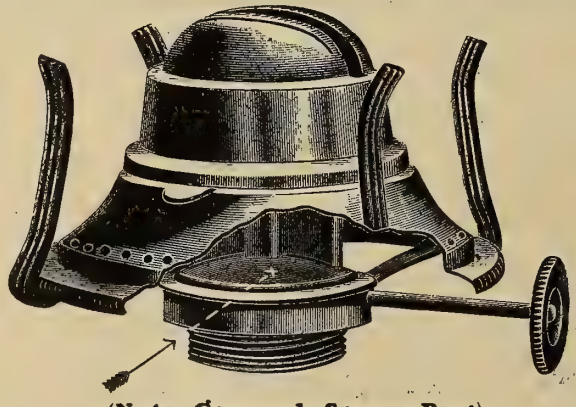
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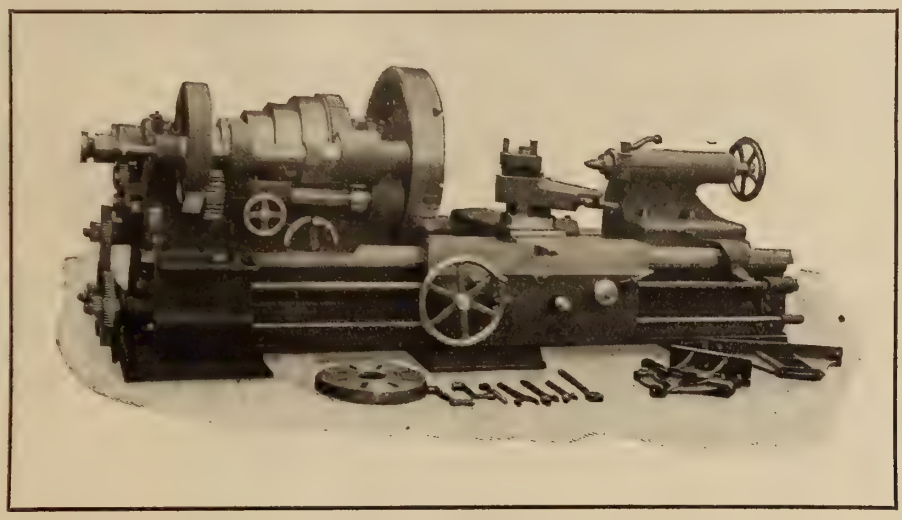
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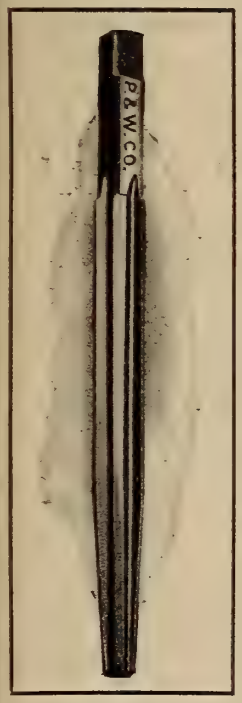
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The JOHN BERTRAM & SONS Co., Limited

DUNDAS, Ontario, Canada



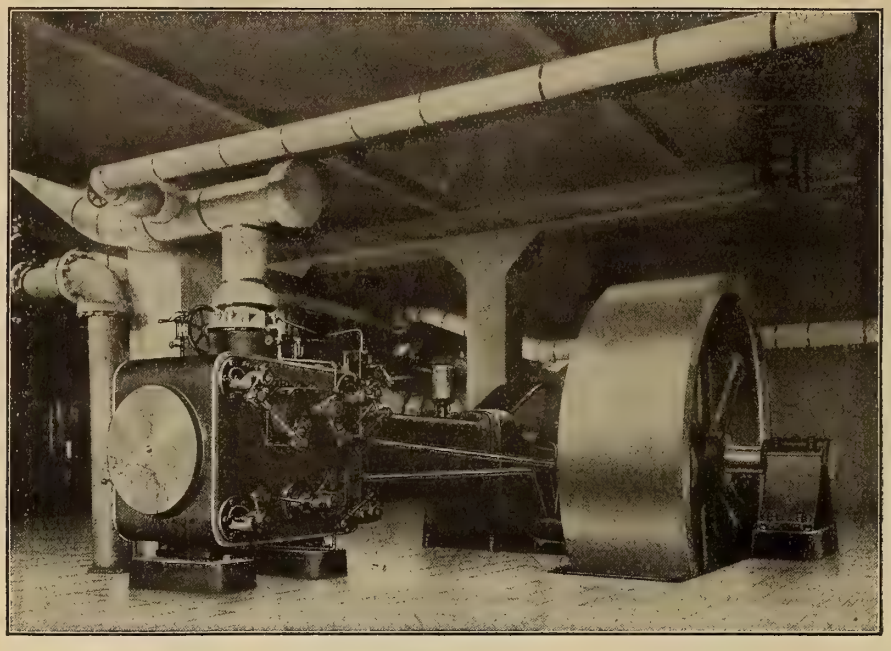




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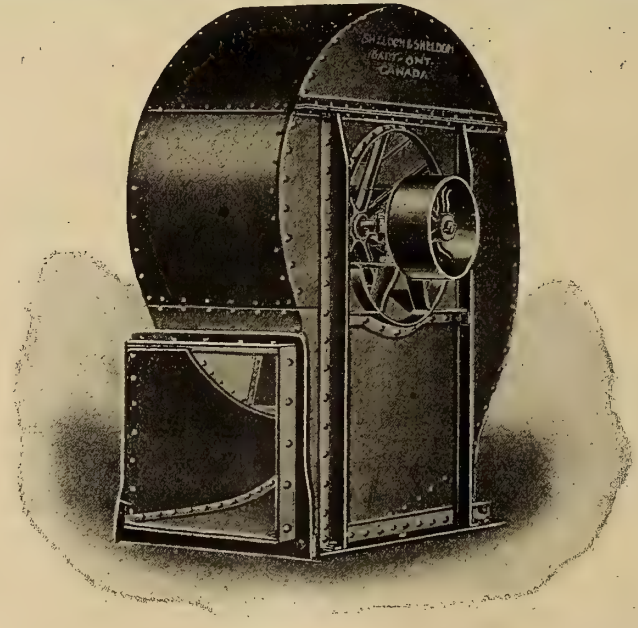
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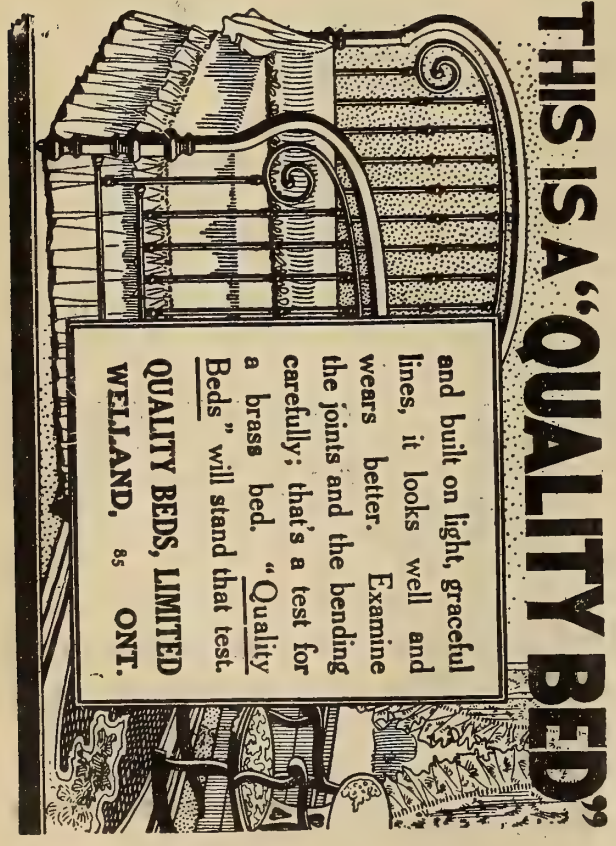
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SMART BAG CO., LIMITED

MONTREAL, March 6th, 1908.

The Standard Automatic Fire Sprinkler Co., Limited
Montreal.

Gentlemen: In regard to the Sprinkler Equipment which you installed recently in our new Montreal factory and warehouse, would say that we are very highly pleased with the manner in which the work was done, and the way in which you carried out your contracts with us. The entire equipment has been inspected several times by engineers representing the Manufacturers' Mutual Fire Insurance Co., of Providence, R. I., and in every case they have reported favorably.

We are pleased to give you this testimony, and you are at liberty to use us as a reference if you desire.

Yours very truly,
THE SMART BAG CO., LIMITED.
Chas. A. Smart,
Dict. C. A. S. President and Managing Director.

FENLIN LEATHER CO., LIMITED

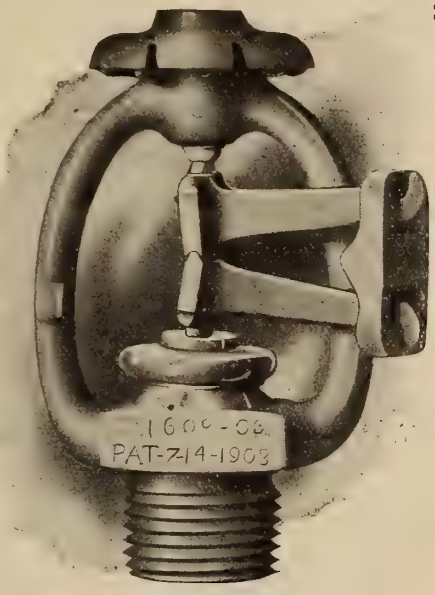
MONTREAL, March 24th, 1908.

The Standard Automatic Fire Sprinkler Co., Limited.
Montreal, Que.

Gentlemen: In reference to the Automatic Sprinkler Equipment which you installed in our tannery situated in St. Henry Ward, Montreal, this has been recently examined thoroughly by the inspectors of the fire insurance companies and found in every way satisfactory to them.

We may add that we are pleased with all the work that your company undertook to do, and the manner in which you carried out your contract, all the parts of the equipment being good and strong, as any interested parties can at any time see for themselves. We are,

Yours very truly,
THE FENLIN LEATHER CO., LIMITED.
Per H. E. McIntosh, President.
Dict. H. E. McI.



NIAGARA-HIBBARD

AN EXPERT'S OPINION

"I unhesitatingly recommend them as the best of all known means for controlling a fire."

JOHN R. FREEMAN
President American Society Mechanical Engineers

HENRY BIRKS & SONS, LIMITED

MONTREAL, March 25th, 1908.

Messrs. The Standard Automatic Fire Sprinkler Co., Limited.
Montreal.

Gentlemen: As your contract for equipping our new building is now complete, we think it only just to express to you our satisfaction with the way you have handled the work. Everything about it appears most satisfactory and we feel that special credit is due, considering the difficulties of the job on account of the many alterations and changes in the building.

Yours very truly,
HENRY BIRKS & SONS, LIMITED.
Gerald W. Birks, Treasurer.
G. W. B.

GANONG BROS., LIMITED

ST. STEPHEN, N. B., Sept. 24th, 1907.

The Standard Automatic Fire Sprinkler Co., Limited.
Montreal Que.

Gentlemen: We beg to advise you that the installation of our Automatic Fire Sprinkler Equipment has been completed in a highly satisfactory manner both to us and to the New England agent of the Cotton and Woolen Manufacturers' Mutual Fire Insurance Co.

We may also say that everything in connection with the contract was carried out in the most satisfactory manner. We have been highly pleased with our business association in this connection, and assure you that if at any time you wish to refer to us, you may do so.

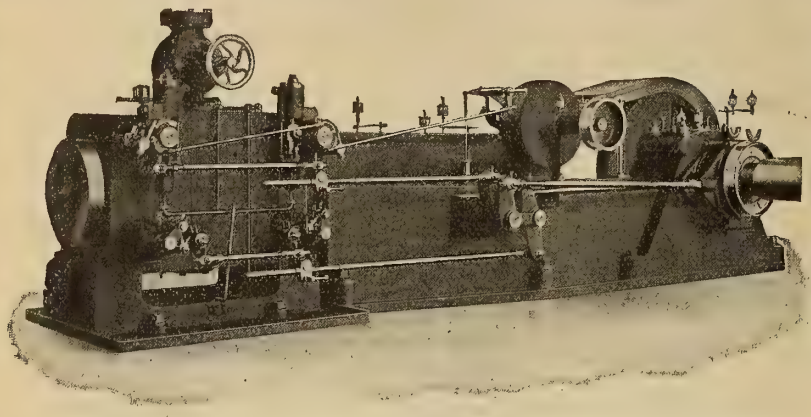
Yours very truly,
GANONG BROTHERS, LIMITED.
G. W. Ganong, President.
G. W. G.
A. V. O.

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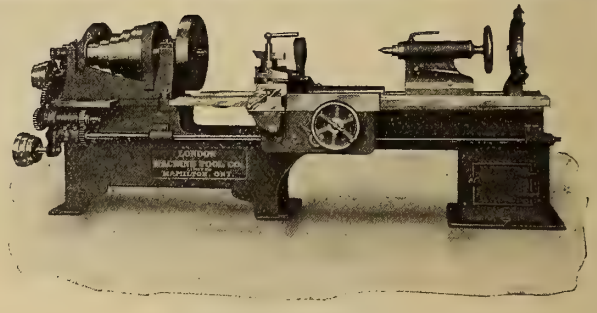
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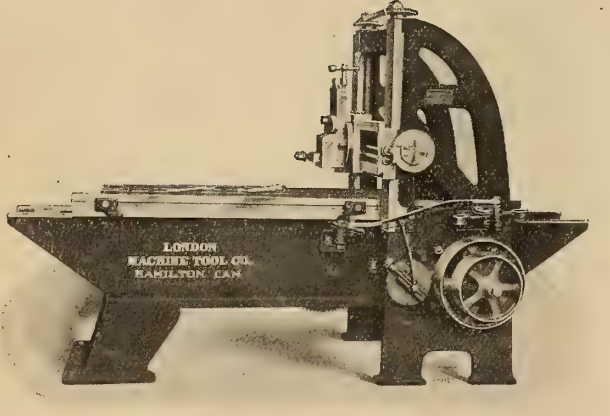
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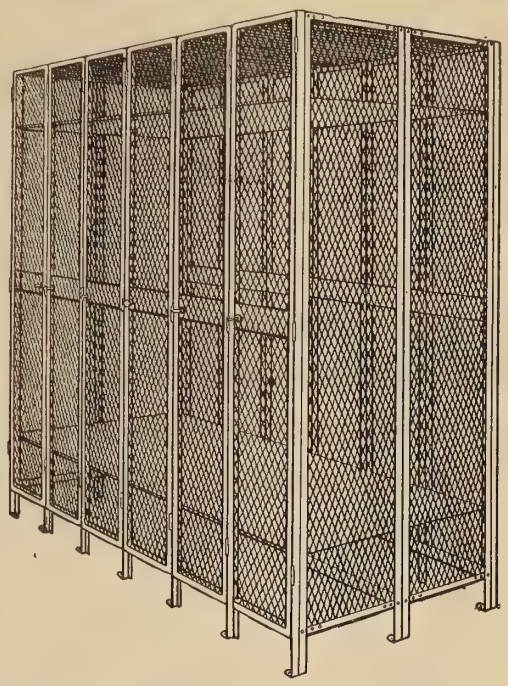
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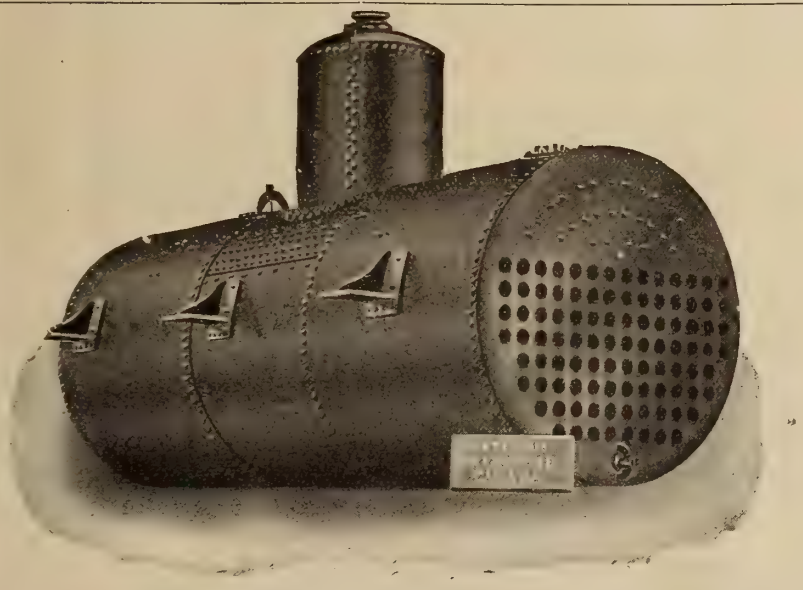
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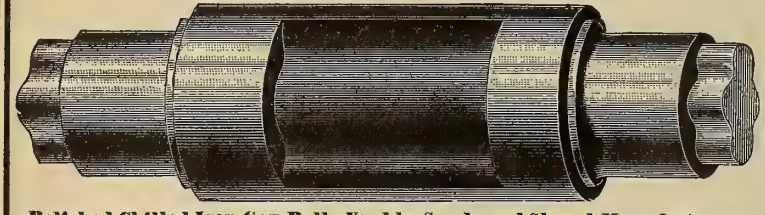
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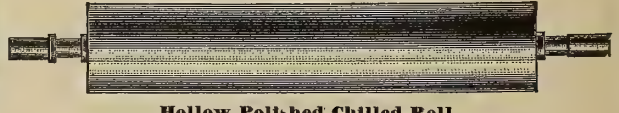
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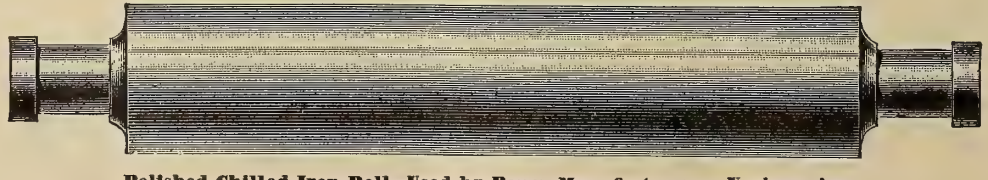
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The Canadian Manufacturers' Association,

Incorporated.

There be three things which make a nation great and prosperous: A fertile soil, busy workshops and easy conveyance for man and goods from place to place."—Bacon.

Vol. VIII. TORONTO, APRIL, 1908 No. 9

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

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General Secretary: G. M. MURRAY.

Editor: F. P. MEGAN.

Advertising Manager: D. B. GILLIES.

THE EDITORIAL VIEW-POINT.

British Money for Canada.

THE success of recent Canadian loans on the London money market is a striking proof of the high standing of Canada and Canadian investments. Only a few years ago British capital was flowing into the United States, and it was almost impossible to get any consideration for Canadian offerings. To-day the situation is reversed. A London broker who was in Montreal recently said that it was impossible at the present time to get a "bob" for the United States in London, while Canada has secured over £10,000,000, and could have had as much more for the asking. While a part of this sum was a Government loan, the mass of it went to railway and industrial enterprises, indicating that everything Canadian has the confidence of the British investor. While this is very flattering to Canada, and promises well for our development, still care should be taken not to shake the confidence reposed in us by allowing our good name to be used in exploiting wild-cat schemes. There is ample opportunity for the safe investment in Canada of the surplus millions of England, and it should be the duty of every well-wisher of this country to help in the proper direction of foreign capital seeking employment here. There is a class of get-rich-quick gentlemen who are ever on the lookout to take advantage of confiding capital and direct it into their own pockets through some fake enterprise which they float on the general good reputation of a country. Now that Canada has won the confidence of the British investor, we may expect to find these gentlemen trading on the reputation of the Dominion. Every Canadian who really wants to see Canada go ahead will keep a lookout for these fake promoters, and expose them whenever occasion arises. It has taken a long time to get the British capitalist interested in Canada, and now that he is turning to us we should use him right so that he will remain with us and help to develop the vast resources of this country.

The Bonus and the Emigrant.

RECENTLY Sir Marcus Samuel, presiding at Guildhall Court, London, attacked the Canadian bonus system, and made sweeping aspersions upon the work of the Canadian booking agents in general. Mr. George N. Savage, Secretary of the British Passenger Agents' Association, takes exception to the statements of the Magistrate, and writes a long letter to the Canadian Gazette, London, in defence of the booking agents. He says the agents desire to work in harmony with the Canadian authorities, and that it is most unfair to attack the system of bonuses, and to paint all agents "black" because of the methods of the few. He asserts that an agent doing his duty earns every penny he gets, and that a £1 bonus on an emigrant that the Canadian Government says is worth £200 to the country is not too great a price. The whole trouble, he says, has been caused by irresponsible and unscrupulous persons engaging in a business of which they know nothing, and out of which they seek to make money without regard to the injury they do and the suffering they cause. Dealing with these people, he says: "During the last three or four years the 'Canadian boom' has brought many undesirable elements into the emigration field, societies and innumerable agencies (some railway companies appointing all their booking clerks or station agents as steamship passenger agents, without any qualification—a system to be deplored and condemned), to scramble for the 'fruits of the careful pruning' by old-established agents. The mushroom agencies have become an intolerable nuisance, and are a menace to the community. Agencies and societies who work emigration into their religious and philanthropic labors—however good may be their intentions—have inundated Canada with a class of people which Canada, from choice, does not want, but which hitherto has been received

without open rebellion." This is certainly very strong language, but it bears out what "Industrial Canada" has maintained: that the fault lies with the Canadian Government, inasmuch as it recognizes these mushroom agencies and pays them commissions on their shipments. The Canadian Government lays down the rule that the bonus is to be paid only for farm laborers, navvies, and domestic servants, but it has not announced any rule by which a bricklayer can be told from a farmer. Mr. Savage tells us that the old-established agents prune the undesirable out, and the mushroom agents gather up the prunings and sell them to Canada at £1 apiece. When the matter of bringing mechanics into Canada for whom there was no employment was brought up in the House of Commons in the early part of the present session, Hon. Mr. Oliver sought to shirk responsibility by charging that the Canadian Manufacturers' Association was responsible for leading these people astray. It was promptly pointed out to him that the Association had nothing whatever to do with the bringing out of the men in question, and he was asked to take back what he had said where he had said it, in the House of Commons. Up to the present time Mr. Oliver has not shown himself to be one of those truly courageous men, who are ever ready to right a wrong unintentionally committed. Mr. Savage puts the blame for the sending of undesirables to Canada on the shoulders of mushroom agencies, religious societies, and philanthropic workers, all of whom exist on the encouragement given them by the Canadian Government, and in the final analysis the Government has to bear the responsibility.

We Want Population.

CANADA wants population—that much is conceded by everyone, and the Government is justified in paying for it. We are not, however, so badly in need of population that the Government is justified in buying the riff-raff of the Old Country and transplanting it into Canada. Mr. Savage says that the booking agent who sends out emigrants should be a man of conscience, and he should have a knowledge of the country and of the capabilities of the people he sends out. It is a serious business, and carries a grave responsibility, but it is to be feared that too many of the agents, who find recognition in Canada, look upon it merely as a good field for graft, and work it on that principle. The orders issued to the Government's accredited agents to restrict their energies to the selection of farm laborers, navvies, and domestic servants, leaves all the rest an easy prey to the grafter. They do not scruple to list them as farmers, domestics or navvies when it means £1 apiece for doing it. If the Governments representatives were authorized to deal with all classes seeking information they would be in a better position to check graft, and send the right people out. The point is that the mere issuing of orders not to send out mechanics does not prevent mechanics being sent out under false pretenses, and then working their way back to damn the country. There are times when we want mechanics for the development of the country and the extension of its industries, and at such times they are just as valuable to Canada as farmers, and the Government should see that they are given every chance to come. When they are not needed let them be warned to remain away. We need population, but it takes more than farmers, domestic servants and navvies to populate a country. It should be the aim, as it is the duty, of the Government to get the best class to come, and to see that they come as they are needed, and not have them pitchforked in here as suits the convenience or the need of the grafter.

A Timely Criticism.

MR. BRUCE WALKER, late Canadian emigration agent at London, England, has made a report to the Government at Ottawa, in which he condemns the methods of the Old Country charitable organizations that promote emigration to Canada. The societies work amongst the city slums of the Old Country, gathering up the scum of the population from the lowest quarters and shipping them out to Canada. In drawing attention to this practice, Mr. Walker has done Canada a real service. Canada is a very large country, and there is room enough here for many millions more people than we have; but there is no place in it for loafers and criminals. This is the worst country in the world for people who want to live without working.

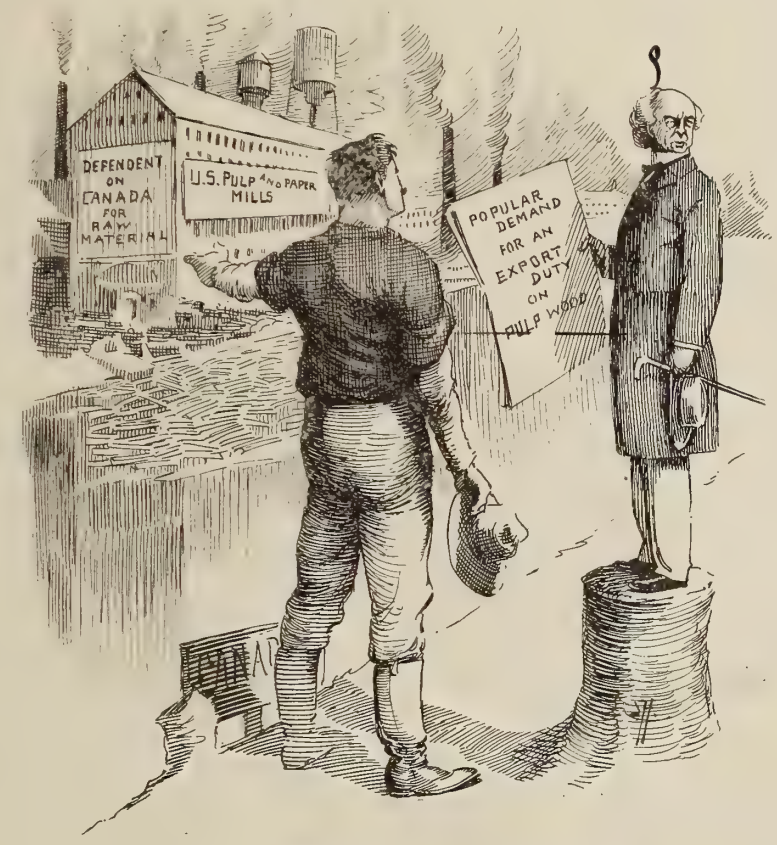
Protection in England.

THE tariff reform party in England is making headway more rapidly than even its best friends hoped for only a short time ago. Already it has gained sufficient strength to win elections, and after the next general election it will not be a surprise to see it with a respectable representation in Parliament. Indeed there are those sanguine enough now to hope to see it with a majority. For years free traders in Canada have held up England as an example of the wonderful things free trade can accomplish, but it looks at present as if the day was fast approaching when they will not have that peg on which to hang their arguments. If any country in the wide world could make a success of free trade that country is England in her "splendid isolation." Her manufacturers have a large population packed on a comparatively small island, and the transportation charges outsiders have to pay to reach her market are in themselves a protection to the home industries. But even this is not enough, and the sentiment in favor of a Customs tariff is growing, and growing rapidly. Foreign competition in the home market is hitting the British manufacturer harder every year, and he naturally feels that he should have some measure of protection, such as other countries maintain for the benefit of their industries. That the claims of the tariff reformers in England are reasonable and appeal to the good sense of the English people is manifested by the rapidity with which the protection sentiment is growing amongst them. A policy based upon the principle of conserving for its own citizens all the trade advantages a country possesses is one that must appeal to the common sense of any people who are endowed with that very desirable attribute. As the English people have always been noted for possessing an uncommon amount of common sense, it is to be expected that they will fall in line with the views of the tariff reformers once they have got them fairly before the public. The surprising progress they have already made is an indication of what may be expected in the not distant future. It will be a killing setback to our Canadian friends, who were wont to advocate for Canada a policy of "free trade as they have it in England," to find England adopting a policy of "protection as we have it in Canada." Our public men have stopped talking free trade because they know that such a policy is impossible here. The question with us now is not only the restriction of the importation of foreign manufacturers, but also the necessity of restricting the exportation of our raw materials.

The Tax on Commercial Travellers.

PRINCE EDWARD ISLAND is the only Province in Canada which continues to tax commercial travellers from other provinces. The Provinces of Quebec and British Columbia, in acordance with the agreement arrived at at

the meeting of the Provincial Premiers, in 1907, repealed the tax they had been imposing, but Prince Edward Island, which was a party to the agreement, has so far failed to fulfil its undertaking. The result is that manufacturers in other provinces find it unprofitable to send their travellers into that province, and the people of Prince Edward Island are deprived of the benefits of the low prices at which they could purchase many commodities manufactured in the other provinces. The Legislature which, in theory at least, is supposed to enact laws for the benefit of the whole people of the province, by this antiquated legislation is really doing the very opposite. However great may be the loss of the manufacturers from other provinces who are prevented from doing business in Prince Edward Island, it is only a fraction of what the people themselves have to suffer through being denied the privilege of dealing where they can get the most for their money. Leaving out of the question altogether the moral obligation of the Legislature to carry out the undertaking of its Premier to repeal the tax, the self-interest of the people ought to be sufficient incentive. One of the drawbacks to our system of Government is that it is apt to make us too provincial in our ideas. Our Legislatures, which at best are only overgrown county councils, are apt to get inflated with false ideas of their own importance, and to interfere with matters which they are not big enough to control. We never had a more striking example of this unfortunate narrow-mindedness than was furnished us by the tax on commercial travellers from sister provinces. It should be enough that a traveller is a Canadian to carry him tax-free in any part of Canada. If we are to become the great nation we hope to be, we will have to grow men broad enough to recognize the whole of Canada as our common country, and it is a pity if Provincial politics are going to be allowed to so warp our souls and restrict our visions that we cannot see limits of our own provincial boundary line. It is to be hoped that Prince Edward Island, which has produced some of the broadest-minded and ablest of our public men, will not allow itself to lie much longer under the imputation of being the only narrow-minded member of Confederation.



JACK CANUCK:—"Your duty is plain, sir. It is an export duty."

Want to Run the Factory.

THE employees of the Dominion Textile Company went out on strike recently in one of the company's Montreal factories. The strike was not for more wages or shorter hours, or different conditions—it was simply an attempt on the part of the employees to take over the management of the factory. An assistant foreman appointed by the management did not meet with the approval of the employees and they ordered his discharge. The management refused to obey orders and the employees went out on strike, and closed down the factory. This is a splendid example of the benefit of unionism to the workingmen. At a time like the present, when they ought to be happy to have employment, and thankful to their employers for keeping the factory in operation, they quit work because they are not allowed to hire their own superiors. These are the very considerate people whom the Toronto Globe suggested should be kept at work at the expense of the manufacturers, whether or not there was any demand for the products they were turning out. It is instances such as this that kill the sympathy of the public for working people, who allow themselves to be led by union agitators into committing all manner of follies, and making such unreasonable demands that no self-respecting management could comply with them. If the management of a factory is not to be at liberty to make its own choice of foremen, then surely it is time to sell out and let the employees find places where they can.

The Insurance Act.

MEMBERS of the Canadian Manufacturers' Association carry at least $500,000,000 of fire insurance on their various plants, and it can be readily understood of what vital importance insurance legislation is to them. Canada has not had to deal with any vast conflagration, such as devastated various cities of the United States, but our good fortune in the past does not give any guarantee that disastrous fires will not visit us in the future. Insurance is protection against future possibilities, not against expectations. The possibility of a great fire grows as our industrial centres grow, and it is of vital importance to see to it that our insurance companies are in a position to meet their obligations under such circumstances. With this end in view, there are some weaknesses in the insurance law of this country which the manufacturers throughout the country would like to see remedied. Section 64 of the new Act defines the class of investments Canadian companies may make, and sub-section 2 of this section is entirely new, and reads as follows:

"2. Any company may deposit outside of Canada such portions of its funds and securities as is necessary to the maintenance of any foreign branch or branches: Provided that all other securities of such company shall be held at the Head Office of the company or elsewhere in Canada."

Under this section it is open to our Canadian companies to transfer all their funds, over and above the amount required to be kept at home to meet Canadian liabilities, to foreign countries. The foreign policyholder would thus be getting added protection at the expense of the Canadian, who would have less adequate protection. This section should be revised in such a manner as will ensure to Cana-

dian policyholders the fullest possible protection. In other words, the Canadian Fire Insurance Law should be so framed that the Canadian companies operating under it would have to give the preference to the Canadian people. The Canadian Government is under no obligation to look after the interests of foreigners who have Governments of their own to take care of them.

Policyholders' Security.

THE security of a policyholder is the capital and the surplus of the company in which he holds his policy. The surplus is, of course, the chief gauge to the stability of a fire insurance company, but the way this is made up differs very greatly in the United States and Canada. In the former the capital as to the insured is a liability, and the surplus must be over and above the capital. In Canada the capital is not a liability, and the surplus is merely the difference between assets and liabilities. For instance, a Canadian company with a million dollars capital, and half a million surplus in the United States, would have a half million deficit, because the million dollars capital would be charged as a liability, thus wiping out the half million surplus, and leaving a half million liability unprovided for. In the United States, therefore, a company to continue in business must maintain its capital unimpaired; while in Canada a company can go on showing surpluses after its capital has disappeared altogether. It is clear, therefore, that the safety line of our Canadian companies is much lower than the standard in the United States. Here the mere surplus as between liabilities (made up of all unpaid claims, all unpaid accounts, and reinsurance reserves) and assets, is all the policyholder has to rely upon, while in the United States he has the surplus plus an unimpaired capital. It is true that in this country he has the capital also if there is any capital, but of that he has no assurance, for the insurance laws of Canada do not compel a company to keep its capital intact. If the Canadian insurance law made the capital of a company be taken into account as a liability, the same as is done in the United States, a great many of the companies showing big surpluses now would be placed in a different light before the public. The time has come when there is need of raising the standard of security to the policy-holders of Canadian companies, instead of lowering it by the enactment of such an investment clause as the one quoted in the preceding paragraph.

Limitation of Risks.

ANOTHER matter of importance is the limitation of risks. It is time that some provision were made to limit the amount of insurance a company may take in the congested areas of large cities. In case of a conflagration the sufferers have to look to the insurance companies that carry their risks for the means of re-establishing themselves, and the law should prevent companies contracting for more than they are able to discharge. A company that is not able to pay every claim that may be made on it is really only gambling on the chances of escaping a disastrous fire. If companies are to be permitted to take gambling chances, the security of the policy-holder is reduced to a still smaller margin. The Canadian Manufacturers' Association has asked that returns be made of the insurance in congested districts, and that these latter be defined by a Government commission, and that in such districts a company be not permitted to carry a greater total insurance than the amount of its surplus. This is surely not asking too much, particularly in view of the way in which the surplus is made up in Canada.

Mutual Fire Insurance Companies.

THE manufacturers of this country have recognized for a long time the inadequate security afforded them by the stock companies under the existing laws, and they have felt, moreover, that the premiums exacted were out of all proportion to the risks carried. In an effort to secure fairer rates the Association formed two mutual fire insurance companies, and in this connection they presented the Minister of Finance with statements showing the growth, development and successful operation of such companies in the United States. It was hoped that as a result of this information a section would be added to the Insurance Act dealing exclusively with mutual companies. No such section appears in the new Act, however, and the manufacturers are naturally disappointed. They felt they were making a reasonable request when they asked that the Act should recognize the difference between a number of property-holders co-operating together to protect themselves against loss by fire, and stock fire insurance companies taking premiums in advance and operating for the benefit of the shareholders of such companies. The United States, where the insurance laws are much more rigorous than here, recognizes the difference between the two classes, and does not exact a "deposit" from the Mutual. The new Canadian Act, however, reverses this order of things. It lowers the standard of the Stock company, and raises the standard of the Mutual by the exaction of a "deposit" from the latter the same as from the former. The manufacturers ask that a new section be added to the Act dealing exclusively with Mutual companies, and they suggest:

"That the basis of incorporation should be prior applications on at least 300 separate and distinct risks, with a guaranteed amount of insurance of one million dollars upon which the premium notes shall be at least seventy-five thousand dollars, and of which at least twenty thousand dollars shall be in cash; that in case of a company insuring risks protected by automatic sprinklers, the provision shall be applications for 150 separate and distinct risks, with a guarantee amount of insurance of one million dollars upon which the premium notes shall be at least fifty thousand dollars, and of which at least fifteen thousand dollars shall be in cash."

They ask also that the clause in the bill forbidding individual underwriting should be struck out. It is pointed out that individual underwriting was the basis upon which the system of insurance was founded, and is still being operated to great advantage and with great success in Great Britain and the United States.

The Man Who Knows.

SEND for Johnston, he knows," is the text of a correspondence school advertisement running in some of the magazines, and it has a meaning far deeper than most of our working people realize. The man who knows is the man who is always in demand. For him bad times have no terrors, and cuts in wages no sting. The man who knows is needed so long as a wheel is turning, and he always gets his price. There is no one so interested in the man who knows as the manufacturer. He needs him in his factory, in his office, and on the road. He is the mainspring that keeps the wheels of commerce revolving, and one of the drawbacks of our country, from a manufacturer's point of view, is that there are not enough of his kind to go around. To produce men who know, we are sadly in need of technical schools, where our workingmen would have the chance to obtain the knowledge that marks the difference between the man who works with under-

standing and the man who performs his task mechanically, and keeps on in the same old rut all his life. Our system of education is incomplete without technical schools. It is the right of our workingmen to have them, as it is in the general interest of Canada to develop a class of workingmen who know. We hear the cry every day that what this country needs is population—men and women to develop its resources and turn to account its latent possibilities. Our Government does not hesitate to spend large sums of money annually in bringing in people from other lands to become citizens of this country, on the ground that they are needed for its development. It does not seem to have occurred to them that another way of increasing the effectiveness of our population is by developing the people we already have. Teach our workers how to work and you will double their capacity. A thousand blind toilers are not worth as much to this country as five hundred intelligent workingmen, who can be put in the class of men who know. If some of the bonus money that is wasted on incompetents and undesirables from abroad were devoted to the development of men who know at home the return to the country would be vastly greater than it is at present. Give our workingmen a chance.



UNCLE SAM:—"Great Scott! I don't believe that's merely luck. I believe it's the live bait."

Canada is Strongest.

THE number of large United States corporations that either passed or reduced dividends since the first of the year is ten, and, curiously enough, in Canada the number of corporations that have increased dividends is also ten. There have been a couple of reductions here also, but they are either offsprings of United States concerns or close affiliations of them. The purely Canadian institutions have held up under the stress of the money stringency in a manner that is, to say the least, remarkable. There has been, and there still is, a certain amount of dullness in certain lines of trade in this country, but these are exceptional and the position of the country generally speaking is so strong that there cannot fail to be an early revival that will surpass all past records. Canada is the safest country in the world to-day for the employment of capital, and the one in which the greatest returns are sure to be made in the future. The conservatism of the Canadian, as compared with the gambling spirit of the average business man of the United States, is the thing that tells when the crisis comes.

Unjust Bills of Lading.

IN taking up the question of the bills of lading which Canadian exporters are compelled to sign, the Senate has called attention to one of the greatest injustices under which Canadian manufacturers and merchants suffer. Senator Campbell, in moving the second reading of the bill dealing with the question, said that its object was to remove the handicap placed upon Canadians by the steamship companies. There were unjust and unreasonable provisions in their bills of lading, which relieved the company from responsibility for damages in transit. He instanced a clause in their bills of lading by which a company could disregard marks in the delivery of goods. Under this clause a steamship company could take a consignment of flour for an English firm and make delivery of a different brand from another consignment. Upon Senator Ferguson remarking that he thought a good many of the provisions in the bills of lading were put in for the purpose of bluff, Senator Campbell pointed out that the contracts on the bills declared that the British law governed, and it had been held that if a man accepted such a bill he was subject to all the conditions of the contract. Senator Derbyshire said that this was a very old question. For years commercial bodies in Canada had been trying to get as good a bill for Canadian goods sent from Montreal as was given on United States goods from Chicago sent from Montreal. They had not succeeded, and to-day the Chicago shippers enjoyed a lower rate than Canadian shippers on the same class of goods, and that from steamship companies which Canada had subsidized. Sir Richard Cartwright said the question was engaging the attention of his department, and he suggested that the bill be sent to the Banking and Commerce Committee of the Senate, where all interested could be heard, which was done.

An Important Question.

THIS is a question of very great importance to our manufacturers, and it is to be hoped that it will not be allowed to die in the Committee to which it has been sent. Of equal importance to shippers is the bill of lading which our railway companies have adopted. It has conditions equally as unreasonable and unjust as that of the steamship companies, and is just as much in need of amendment. It was drawn by the railway companies, and is naturally a one-sided contract. It was not all drawn at one sitting either, but as conditions arose from time to time, where the railway found itself compelled to make good some shippers loss through damages to transit, a new clause was added to relieve the railways from responsibility under like circumstances in the future. As it stands to-day, the railway bill of lading is a whole volume of conditions in fine print to which the shipper is asked to subscribe before his goods are forwarded. While the Senate is at work on the bill of lading of the steamship companies, it could very profitably look into that of the railway companies, and see if it is not possible to get out a simple form that will leave a few rights to the shipper, and place a few responsibilities upon the railway companies. A uniform bill of lading,

embodying a contract fair to both parties, is something to which every shipper is justly entitled.

The Lemieux Act.

PROF. SHORTT, who is acting as chairman of the Conciliation Board enquiring into the dispute between the Dominion Coal Company and its employees, has been praising the Lemieux Act. He says it is highly practical in its operation, and, therefore, useful to a degree not attained by the labor laws of other countries. Its greatest asset, in his opinion, is that it is an alternative rather than a compulsory measure in the matter of results. While parties at variance have to submit to its provisions, it does not prohibit the carrying on of strikes and lockouts in cases where satisfactory terms cannot be obtained. Prof. Shortt has, himself, done a great deal to make the Act a success. In its original intention it was meant to be administered in a formal and public manner, like a court of law. This publicity was a great drawback to it, for neither the employer nor the employee, and more particularly the latter, wanted to air their grievances through the press, where every hasty word would be recorded under a sensational heading. Prof. Shortt recognized this, and he closed the door on the press, stripped the proceeding of all unnecessary formality, and sought to bring the parties together in a spirit of conciliation. The Nova Scotia press demanded admission to the meetings in Sydney, claiming it as a right, but Prof. Shortt very properly shut them out. Administered as Prof. Shortt conducted his enquiries under its provisions, the Act serves a useful purpose as a medium through which both sides to a labor dispute can be brought into touch and given an opportunity of talking their differences over on equal terms. Under less able administration the Act would hardly merit the praise he gives it.

Forest Preservation.

THE question of the preservation of our forests is becoming a very live one, and it is none too soon that the matter should be taken up earnestly. All those who are interested in lumbering are fully aware of the need there is for immediate action. The reckless destruction of our forests has already cost the country millions of dollars, and the time has come when better methods of dealing with this important source of natural wealth are urgently demanded. The forestry associations, which have taken the matter up in the different provinces, are demanding legislation on the subject, and our legislatures cannot act too quickly to meet the needs of the situation. In the past, when the lumber industry was confined to the getting out of square timber and sawlogs, a fair proportion of the smaller trees escaped; but now that the pulpwood industry has grown to such proportions everything falls before the axe of the woodman, and the country, save for the stumps, is left as clean as a field over which a reaper has passed. This wholesale destruction of the forests has much more far-reaching consequences than the ending of the lumber industry. It affects the rainfall, changes the course of the rivers, destroys water powers, and renders large tracts of fertile land barren and unproductive. The forest protects the snows of winter from the awakening rays of the sun in early springtime, so that it melts gradually and is drained down through the rivers at a time when the sprouting crops of the farmers need the invigorating moisture it brings them. It is a well-established fact that a country denuded of its forests has a poorly distributed rainfall, and loses much of its fertility. The first blush of spring melts the snow from the bare earth, swells every little stream into a torrent, floods low lands for a brief period, and in a couple of weeks is all gone, leaving the country to burn up for want of moisture. In some of the older parts of Canada this condition of things has already been experienced, and the time has come when measures will have to be taken to prevent more serious damage in the future. The worst offenders are the people of the United States, who have acquired millions of acres of pulpwood forests, and whose only care is to keep their paper mills in the United States supplied with the raw material from Canada. The jobbers and "fake settlers," who are equally reckless destroyers of young trees, export their entire cut to the United States. It is well known that the United States paper mill is the monster that is destroying our forests in a reckless and shameful manner, and all that Canada gets out of it is $6.00 or $7.00 out of every $40.00 or $50.00 that every cord of pulpwood is finally turned into. Surely this is not going to be permitted to go on as long as there is a tree left to cut. Are we going to destroy the fertility of our farms and the value of water-powers for the miserable percentage the Americans allow us of the wealth of our forests? It is time for us to wake up and protect our interests. An export duty on pulp and pulpwood would be an effective remedy.

The Budget.

HON. MR. FIELDING, Minister of Finance, delivered his Budget speech on March 17th. While there were no startling tariff changes announced, the speech was, as usual, a very interesting one. It shows that the revenues of the country, like ordinary business institutions, are feeling the depression. The Minister anticipates a heavy falling off in the receipts of the Government during the year, and predicts that the addition to the public debt, as a result of the twelve months' operations, will be some twelve millions of dollars. This money will be expended on the vast enterprises, such as the G. T. P., which the Government has under way, and the excess of expenditure over receipts will be chargeable to capital account. The large sums of money which the Government proposes expending this year will help materially in relieving the shortage from which the country is suffering. For the Government to curtail expenditures at this time would be poor policy, especially as the works on which the money is being spent are necessary, and will be a permanent asset. The falling-off in revenue will be made up almost entirely in a falling-off of custom receipts, indicating that he expects a heavy shrinkage in imports. Both the Post-office Department and the Intercolonial Railway show a surplus, which is something to be thankful for.

The Tariff on Tobacco.

THE only radical change made in the tariff has to do with tobacco. The tariff has been so arranged as to give a decided advantage to the Canadian-grown leaf. This will hit cigar manufacturers with established brands pretty hard. They claim there is no tobacco grown in Canada suitable for the making of the better class of even five-cent cigars, not to speak of the higher-grade brands. Those who have brands with established reputations built on the superior quality of the imported leaf will be forced to meet a keen competition at a great disadvantage. A cheap cigar selling at possibly as low as $15.00 a thousand will, no doubt, be manufactured from home-grown stock, and as there is to be no distinction in stamps hereafter, these will come into competition with brands that sell as high as $35.00 and $37.00 a thousand, and cannot be turned out for less money. They say that it is impossible to grow suitable tobacco in our climate, and they will have to continue to use the imported leaf or sacrifice the reputation of their cigars. However, if the new regulations result in building up a home industry, there will be no serious objections to them outside those immediate effects.

D. M. COUGHLIN.

The Business Outlook

Confidence Expressed by Leading Manufacturers and Financial Experts in the Situation in Canada for the Present Year.

TO ascertain the business outlook as seen by men who are in close touch with industrial conditions, the demand for goods, the needs of the market, and the possibility for financing the year's output, "Industrial Canada" recently invited Messrs. C. C. Ballantyne, the Sherwin-Williams Co., Montreal; Byron E. Walker, President of the Bank of Commerce, Toronto, and W. H. Rowley, President of the E. B. Eddy Co., Hull, to make a statement on the question. The replies are published below. No commentary is needed on the uniformly optimistic though sane expressions of opinion.

Sturdy Optimism from C. C. Ballantyne.

The Editor "Industrial Canada," Toronto, Ontario:

Dear Sir,—In answer to your favor of a recent date, regarding present business conditions and future outlook, I certainly can see no reason for anyone entertaining any other but the most optimistic views in reference to the continued prosperity and development of our country, with all her diversified interests.

True, during these last few months there has been a temporary cessation in our prosperity and rapid development, due to the serious financial panic suffered by our neighbors to the south of us and reflected in a limited way in Canada. Then, again, the partial failure of the crop in our great West, together with a financial stringency, has had its effect. Thanks to our splendid banking system, Canada has avoided a financial panic, and proven once more the value and soundness of our banking policy.

Business all over the country is rapidly improving, and with a favorable spring, and money easier, trade conditions will soon return to their normal activity. Our great railways are not slackening their efforts any, but are pushing forward their large development schemes with all energy and enthusiasm, for the present and future greatness of our country.

Now is the time in our history for all true Canadians to be imbued with well-directed optimistic enthusiasm, for have we not every reason to be? There is nothing pertaining to the situation from any standpoint in Canada to cause us to feel otherwise. Let us all put our shoulder to the wheels of commerce with greater vigor than ever and make the most of 1908.

Yours very truly,

C. C. BALLANTYNE.

Byron E. Walker Hopeful, Though Cautious.

To the Editor "Industrial Canada":

While there is much in the present situation to cause business men to be unusually careful and prudent, there is nothing to warrant the belief that, provided the crops of 1908 are normal, we shall not before long be again in a quite prosperous position. We have to get over the effects of over-importation, lean crops, and a money market overdone throughout the whole world. Some contraction is not only natural, but desirable, until our next crop has been safely marketed. It, however, looks as if immigration into our North-West is not to be very much restricted by what has happened during the past year, and there will also be a great deal of railroad building, the natural concomitant of such immigration. Apart from this, it is to be hoped that municipal and all other public improvements will be curtailed as much as possible, in the same manner in which expansion of industrial plants and other private building operations will also be curtailed. It is only by prudence in this respect that we can hope to have matters return rapidly to a normal condition.

BYRON E. WALKER.

Volume of Trade Will be Satisfactory.

The Editor "Industrial Canada," Toronto.

Dear Sir,—I delayed answering your enquiry about the business outlook generally in Canada for the coming spring until I had full details for 1907, and late reports from all over Canada, so as to judge of the outlook for the current year's business from every standpoint, for staple goods and wares of everyday use and necessity.

When clouds were rising in the States last autumn, we all looked for and soon found some little reflection of the trouble.

Mr. Millen, our joint manager, last summer made a tour of the West, visited every branch and agency, and saw most of our customers in the wholesale grocery and jobbing trade, between Hull and Victoria, B.C. On his return, I went to the Eastern Maritime Provinces and visited nearly every city and large town in Nova Scotia and New Brunswick, and saw hundreds of our customers and merchants in all lines of trade. Thus we have talked with many of the leading manufacturers and business men in all parts of Canada, and find that while caution was plainly observed everywhere in the purchase of the wares and supplies required, and while there was an earnest effort, in some cases anxiety, to meet payments and reduce stocks a little so as not to be overloaded, with a well-defined determination to shorten up credits and reduce outstanding indebtedness, there was no panic, no distress, and no real cause for discouragement; there was, however, a little setback for some thirty days last fall, but the slight halt or hesitation noticeable in business in Canada in the latter part of October, and early days of November, was soon got over, and trade has since been good.

We did more business in 1907 than in 1906. January and February of 1908 show larger sales and better payments than in any January or February for seven years past.

Although our sales for 1907 showed a satisfactory increase for the year, there were still some rumblings and murmurings about business falling off, and so on, so we had a conference of our managers, agents, and representatives from one end of Canada to the other, to find out what the actual conditions were during the first six weeks of this year (1908), and what their opinion was of the outlook for the rest of the year. The result of the conference fully justified the information we had gathered, and the view we had held, viz., that while care and caution had been exercised in the purchase of goods, and merchants were anxious and determined to pay off their debts, and although there was some fear in some quarters, there was no cause for anxiety either as to the amount of business or the volume of trade that will be done this year in Canada in staple articles and goods that are in daily use.

About payments, and answering particularly your enquiry, we find them satisfactory in every respect. Out of a very large number of customers on our books, over 95 per cent. in number and nearly 98 per cent. in amount, pay within 30 days, the bulk of them in ten days, from date of invoice.

Yours very truly, W. H. ROWLEY, President.

The Ocean Port of Montreal

Improvements which are making the Montreal Harbor a fitting terminus to our transportation systems.

ONCE more the season of navigation approaches, and with it comes an interest in the big city which sits at the head of ocean navigation and looks down on a harbour pulsating with life for seven months in the year. Montreal is the great nerve centre from which radiate the nerves of industry, rivers, canals, railways. How far-reaching those nerves are is seen in the movement of grain which sets in in far-off Manitoba, Saskatchewan, and Alberta as soon as the breaking ice permits vessels to ply in the canals and rivers. It is announced that on a certain day the canals will be open, whereby the smaller boats may meet the ocean liners at Montreal. At once the elevators pour their store of wheat into the waiting cars, to be delivered to the grain-carrying fleet at Port Arthur or Fort William, and then carried by stages to the harbours of export. Not a merchant or mechanic in Ontario, not a farmer in the West, but is intimately interested in the harbour of Montreal.



MAJOR G. W. STEPHENS,
Chairman of Harbor Commission.

Many transformations have taken place in the harbour during the past generation. In appearance alone a story full of interest is unfolded in a comparison of the two views of the port, one in 1872, in the days of the sailing vessel, and the other at the present time. What advances have been made in carrying capacity and in speed. It is enough to state that of the foreign trade done by Canada in the year 1907, one-third was done through the port of Montreal.

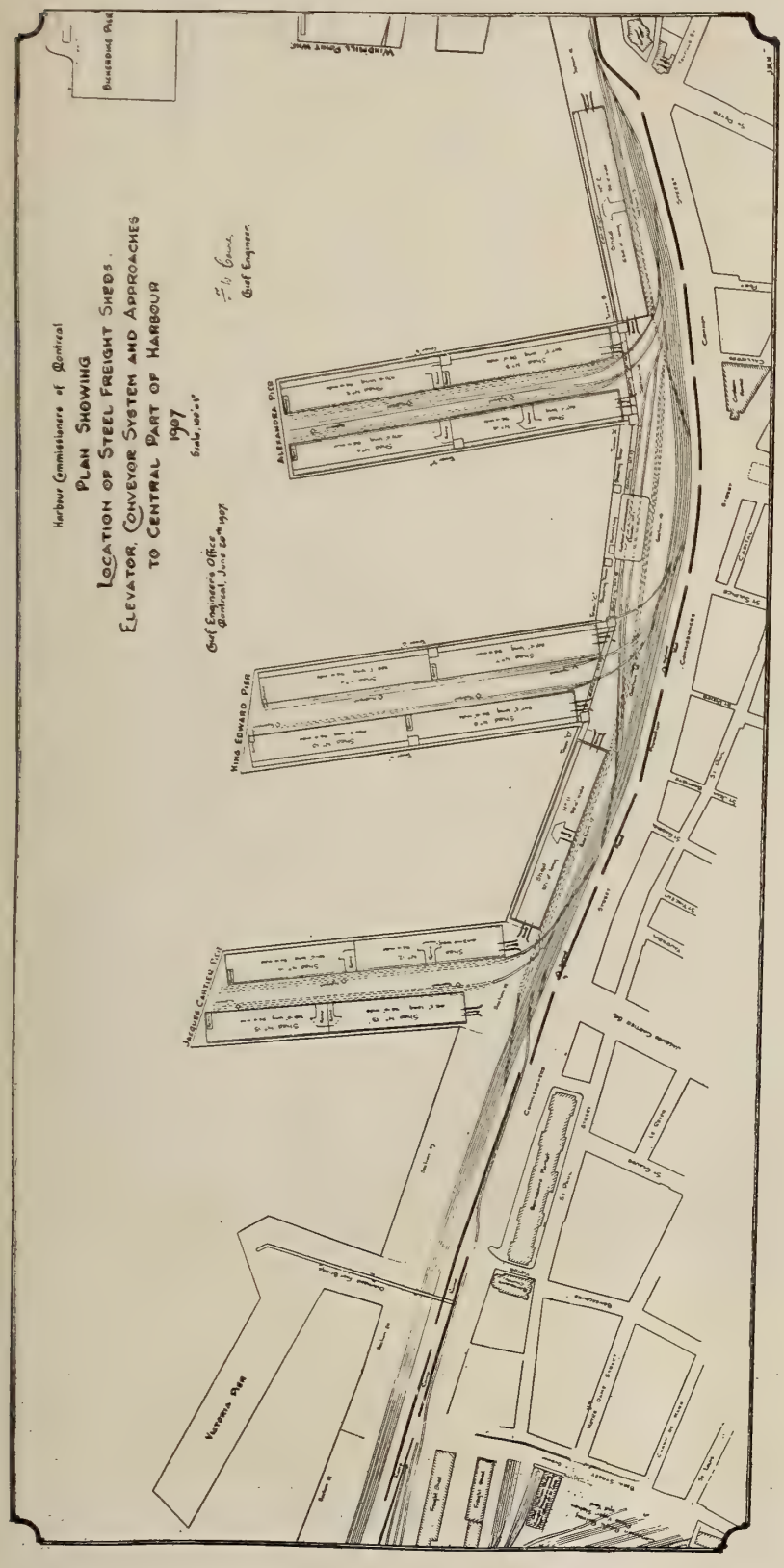
For well on to a century the importance of the St. Lawrence River as a national highway has been recognized by the people of Canada. As soon as the nation found itself it perceived that a ship-waterway whereby the great system of rivers and lakes, which extended from the sea into the very heart of the continent, could be brought into commercial use, must be a part of the nation's work. As early as 1825 the Legislative Assembly of Lower Canada appreciated the expediency of improving the river by means of canals where rapids impeded navigation, or by deepening the channel where such a course was necessary. That decision marked out Montreal as a commercial metropolis. That was the spot where ocean and lake navigation must meet, and the fertile island grew in population, wealth, and importance.



Montreal Harbor in 1872 in the time of sailing vessels

Whatever value the people of Lower Canada in 1825 put upon the transportation possibilities of the St. Lawrence, the development of the succeeding 83 years has exceeded the imaginations of even the most enthusiastic.

No one of those days could forecast the agricultural expansion of the West, entailing a huge annual export of grain, or the industrial progress of Ontario and Quebec, with its great demand on transportation, much less the awakening



of the Orient, with the consequent shipment of merchandise backward and forward between Europe and Asia via Canada. The years have brought these things to pass, and the port of Montreal is fed by canals to the east and west, costing over $125,000,000. The Lachine, which cheats the rapids near the source of the river, opens into the heart of the Montreal Harbour, and is the last artificial link in the system which commences in the harbours of Port Arthur and Fort William and ends in the ocean port of Montreal. Below that improvements to the channel and canalization have made the course to the sea easy.

What is Being Done.

Without referring at length to the work carried on by previous Commissioners, a glance may be taken at the harbour as it is now shaping itself under the care of Major G. W. Stephens, Mr. C. C. Ballantyne, and Mr. L. E. Geoffrion, the present Board of Harbour Commissioners. It should be noted, in the first place, that the whole waterfront is owned by the people and is directly under the control of the Commissioners. This condition, which obtains in Montreal alone of all the great seaports on the Atlantic coast of North America, makes possible large plans for improving the harbour on definite broad principles. The result is seen in the fine concrete piers, in the extensive approaches, and now in the series of permanent steel sheds which are being erected. A plan of the sheds, prepared by Mr. F. W. Cowie for the Board, is reproduced with this article.

Permanent Steel Sheds.

There are fourteen sheds now in various stages of construction, seven of them were almost completely finished at the end of last year, and the remainder will be finished by the end of 1908. They are all steel structures throughout, double-storeyed and surmounted by a grain conveyor, and have sliding doors along the entire length on the lower storey and on every alternate panel in the upper storey. These floors are laid with cement, the upper ones having wire reinforcing. To further facilitate the working of inward cargoes it is purposed to build, at a probable cost of $3,000,000 to $4,000,000, an elevated track passing alongside the sheds and extending for a total length of 3 1-2 miles along the harbor front. One contributing cause to this decision was the discovery that any localized system of carting cargoes to and from the upper storey entailed such additional current expense as to add considerably to the ultimate cost of the goods. The grain conveyors are permanent and capable of distributing grain to ten ocean steamship berths; the galleries and towers being for the transmission of power, accommodation of belting, etc. As Montreal handles about one-third of the total grain production of the Dominion, this equipment is none too extensive.

When the details of this general scheme of expansion are completed, the warehousing capacity of the central harbor will be doubled and the lower or eastern end brought into active and ready communication with the central portion. As matters are at present, the great press of work is in the centre of the harbour, almost within a stone's throw of the busiest part of the city, and while this condition is a permanent one, it will be the aim of the Commissioners to offer sufficient inducement to shipowners in the matter of harbor facilities to automatically relieve the business congestion. At present, with 10,000 lineal feet of deep water berth space in the central harbour,

practically every inch is requisitioned in the demands made upon it by the rapidly growing trade of the port.

Montreal's share of the total national trade is over 27 per cent., or $150,000,000 for last year, and in the facilitation of this trade, or at any rate of the shipping portion of it, she has had a similar experience to many other ports in that the astonishingly rapid growth of water-borne tonnage has almost outstripped her efforts to give it adequate port accommodation. In the last five years the tonnage of all steamers entering the harbor of Montreal has doubled and the advances made by the Allan Line, the C. P. R., and other lake lines in their Atlantic services have practically taxed the limits of the port and of the channel. Since the beginning of the year, however, the announcement has been officially made that the channel has been deepened between Montreal and tide-water to 30 feet and widened to 450 feet through the greater part of its length and to 550 to 750 feet at the bends. A further notable fact intimately bearing upon this point is the decrease by 50 per cent. in the past five years of marine insurance rates upon vessels entering the port, a matter of material moment to the shipowner. The new Board's proposals embrace also the construction of a drydock. While the ultimate intention is to make provision for a dock of 1,000 feet in length, the immediate proposition is for one 670 feet long by 100 feet entrance width, with 33 feet on the sills at extreme low water, the average depth in mid-summer being about 35 feet. It will be built of concrete and provided with a temporary head, pending the future extension.



Montreal Harbour in 1907

The Men Behind the Work.

The improvements which are either already completed or are now under way prove conclusively the superior advantages of a small, efficient commission over a larger and less compact body. The former board consisted of eleven members; the present one of three. Major G. W. Stephens, the President of the Board, needs no introduction to our readers. As president of the Canadian Rubber Co. of Montreal, he holds a high place among the business men of Canada. Those who were present at the convention banquet in Toronto last October will remember the illuminating address on transportation which he gave at that time. It proved a conversancy with the subject attainable only by close study and investigation.

Associated with Major Stephens are Mr. C. C. Ballantyne and Mr. L. E. Geoffrion. The high estimation in which Mr. Ballantyne is held by the manufacturers of Canada is shown by his election to various offices in the association, with the crowning mark of appreciation and confidence in his elevation to the presidency. Of the many qualities which go to distinguish Mr. Ballantyne, the most prominent is undoubtedly his sturdy Canadianism. He stands for a consistent development, which will embrace every phase of the national life. Hence he finds a real satisfaction in the work of bringing to perfection that part of our system of water transportation which is under his charge. By so doing he improves the position of farmer and manufacturer alike, and adds materially to the wealth of the country.

Mr. Geoffrion is the Nestor of the Board in a double sense; he is the oldest in years, and he alone has served on previous Commissions. Consequently harbour problems are old friends to him. Mr. Geoffrion is associated with the wholesale grocery firm of Messrs. C. Chaput et Fils, whose extensive business has brought him into constant practical touch with questions of transportation. He is a man of wide experience, keen intelligence, and practical ability. These three make up the Board.

Nor is the work completed, even in outline. The Commissioners have big ideas of the importance of the task to which they have been set, and what has been planned so far is but the beginning of what is to come. The chairman of the Board is at the present time in England, with the chief engineer, inspecting the best harbours there, searching for ideas for the betterment of terminal facilities at Montreal. In this way it is intended that Montreal shall profit by all the experiments and experiences of older countries. Canada may well take pride in the work which is being carried out in her great summer ocean port.



The Montreal Waterfront.

Perverse Folly.

Restoration of business to its former healthy and flourishing condition depends on several elements. In the first place, the buying public must be induced to buy. But how is this to be brought about unless inducements are offered? When products become cheap enough buying will set in once more. After a period of doubt and misgiving, the greatest of all curatives is the establishment of hope and confidence. Previous to the relaxation consequent upon the financial stringency of the winter, prices had soared to such a point that without the influence of the sweep of prosperity no one would dare to build or develop. The cost of materials had risen so high that the public could not buy. The blame for this condition of affairs was attributable chiefly to the exorbitant and unreasonable demands of labor.

But there was a point beyond which the upward movement could not go. That point was the buying power of the consumers. What is to be done now that the consumer refuses to buy? Evidently reduce the price till he is persuaded. But labor say, "No, there shall be no reduction in wages." As the Journal of Commerce puts it, "All that the Labor Trust has done so far has been to declare that never, never, under any circumstances, can wages be tampered with. The union schedule is sacrosanct. Rather that the streets resound with the tramp of the unemployed than that the bricklayer's $5.50 per day be reduced to $5.49. It is nothing that the fortunate —or unfortunate—few who earn the $5.50 are called upon to support their fellows who live a life of ease and idleness and who might be called upon to work were wages more in harmony with economic conditions. The principle's the thing. Better have 100 men employed at $5.50 a day and another 100 idle than have them all work for $4.50 a day. The Labor Trust has so decreed." Such is not the way to restore or perpetuate good times.

Provision for Old Age.

A special committee of the Federal House has been appointed to investigate the subject of old age annuities. This is in line with the bills introduced into the Senate and House of Commons by Sir Richard Cartwright and Mr. Fielding. In neither case is it proposed to give pensions. The scheme in its present form is designed to give Government assurance for small savings. The committee will invite Mr. Archibald Blue, Professor Shortt, and Mr. J. G. O'Donoghue to give information and views.

How Coke is Made

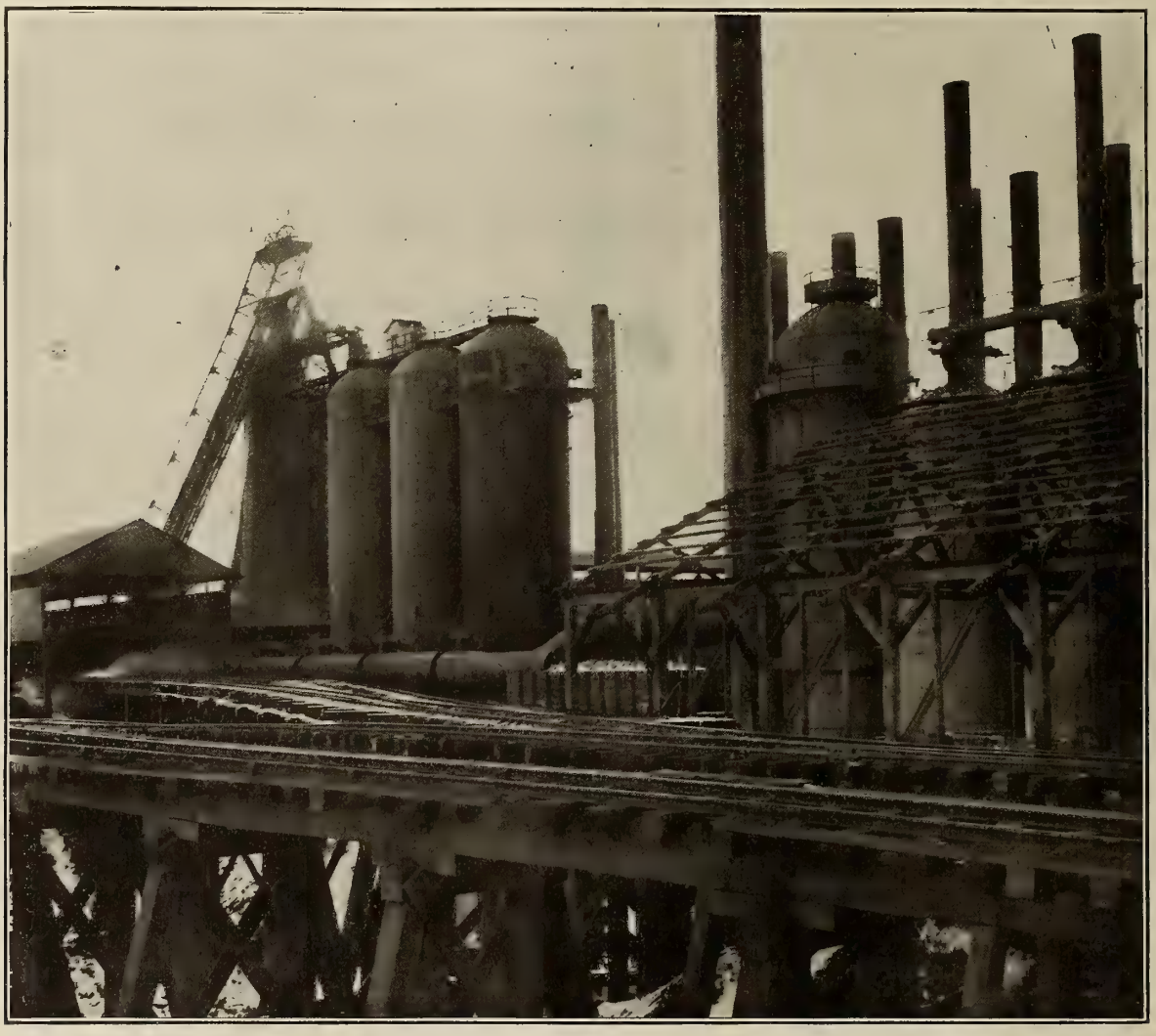
By S. B. Chadsey, B.A.Sc,

COKE is the solid residue remaining after the volatile ingredients of suitable grades of coal have been driven off by heat. It is manufactured either in ovens in which the heat is derived from a partial combustion of the coal, or in specially constructed retorts, which are designed to effect the recovery of the volatile constituents of the coal, and which are heated by burning gases, derived from the coal, in flues adjacent to the coking retorts. This treatment or distillation is carried on commercially with two distinct objects in view, namely: the manufacture of gas usually for illuminating purposes, or the manufacture of coke. In case the production of gas is the main purpose of the manufacture, the choice of coals is made in accordance with that condition; it is subjected to rapid distillation in small charges; and the residue, which is known as "gas coke," is a weak, spongy material, entirely unsuited for use in the blast furnace or the cupola. If, on the other hand, the production of a strong gasless fuel is the main consideration, a more prolonged treatment of the coal is necessary, and the whole process must be regulated with that object in view. In the present article we are concerned only with those cokes that are suitable for use in the main metallurgical arts, and in what follows no reference is made to gas coke or its applications.

Before proceeding to consider the properties of cupola and blast furnace coke in detail, we may refer again to the two general methods adopted in its manufacture.

The Bee-Hive Method of Production.

The older, and in America the more extensively practiced, method is that known as the Beehive process, so named on account of the general form of the oven in which the coal is treated. In this process the coal is charged from cars running on suitably elevated tracks into arched brick chambers or ovens, constructed to prevent too great an access of air from below and at the same time to retain as much heat as possible within the oven space. Doors are provided at the lower part of the ovens for withdrawing the charge, and it is through openings therein that air sufficient for suitable combustion of the gases is admitted by the oven-tender. The interior of the oven being hot from the burning of previous charges, the coal is at once acted upon, and the volatile products begin to be driven off. These, consisting largely of hydrocarbon gases, are



Blast Furnace, Hamilton Steel and Iron Co,

partly burned within the oven dome, but as the combustion is very imperfect, they pass off through the head of the arch in the form of a dull, smoky flame, thus befouling the atmosphere for miles around.

The beehive oven is a development from the earth-covered heaps or "meilers" in which the first coke was produced, and while it represents a great improvement upon the older process, and while it produces an excellent coke, it is nevertheless wasteful to an astonishing degree. All of the volatile constituents are lost, and since towards the end of the burn the gases come off more and more slowly, they become insufficient to protect the residue of coke, which is consequently burned even under the most favorable conditions to the extent of ten or twelve per cent. At the end of a period of from 36 to 72 hours the operation is complete, the coke is withdrawn and quenched with water to prevent further combustion. In these ovens the coking process proceeds from the top downward through the charge, and results in the production of the long columnar pieces with which foundry and furnace men are so familiar. The characteristic bright silvery appearance of beehive coke is due to a deposit of carbon upon the surface derived from the breaking up of hydrocarbon gases coming from the bottom layers toward the end of the burn. This silvery surface, which has come to be regarded by many as an essential feature of good coke, does indeed serve as an indication of the grade of material derived from this process, but is in no way a requisite of that produced in the by-product oven.

An Advanced Method.

The more recent method, which is practically universal in Continental Europe, and which has been developing in America since 1893, is that known as the "by-product" process. In this process the coal is heated in narrow air-tight chambers, so constructed as to admit of the collection of the volatile constitutents. The chambers or ovens are rectangular in shape and are generally arranged in batteries of about fifty. Their dimensions vary, but for the purpose of illustration we may state that at one of the large American plants they are 17 inches wide, 6 feet 6 inches high, and 33 feet long. No combustion takes place within these chambers, the requisite heat for effecting the distillation being derived from the burning of gases in adjacent flues. In this process not only are the by-products recovered in the form of tar, ammonia, and gas, but as the coal is effectively protected against combustion the yield of coke amounts to about 74 per cent., as against about 63 by the older method.

By-product coke differs very greatly in appearance from that produced in the beehive oven. The cleavage takes place in the ovens in a horizontal direction, and the pieces are more nearly cubical in form. The silvery lustre to which reference has been made is entirely absent, and the dull gray surface has been one of the obstacles against which the makers of this coke have had to contend. In point of quality, however, it must be said that if made from the same grade of coal, the product of the by-product oven is superior to its older rival in density, strength, and chemical stability. Of late this fact has come to be more generally recognized among foundrymen, and in some quarters by-product coke is held in the highest favor.

What Good Coke Should Be.

Turning now from this brief outline of the methods of manufacture to a branch of the subject that is of greater practical interest to the consumer, we will consider, under various headings, certain physical and chemical properties that serve to distinguish a desirable from an undesirable product.

Strength.—Every foundryman has had occasion to complain from time to time of the weakness of his coke. It has been delivered to him in small pieces, and containing a large percentage of worthless breeze or dust. Consumption in the cupola has consequently been higher, and the percentage loss of fuel very considerable. The coke has been deficient in strength, a state dependent upon the condition of the cell walls, and this in turn is dependent very largely upon the heat conditions of the coke oven. It is not necessary for a coke to be dense to be strong, although a dense coke must be strong if it is to be of any value. A hard coke showing a very small tendency toward friability may not be in the least dense. There are three conditions upon which strength is dependent: First, the general quality of the coal; second, the percentage of ash and its composition; and, third, the temperature of the burn. Coke becomes harder if it is heated for some time after it is formed, and consequently the longer burnings in the beehive ovens, and the narrower widths of the retorts of the by-product ovens tend to produce the stronger grades. This is one of the causes of the favor in which 72-hour coke is held.

Density.—The density of a coke is dependent, not upon the nature of the cell walls, but upon the extent of the pores or spaces between them, and is, therefore, independent of the hardness. As has been already stated, a coke may be porous and yet hard, and up to a certain limit this is the most desirable condition. The points which regulate the hardness also have a direct bearing upon the porosity, namely, the grade of the coal and the duration and method of coking. The greater the percentage of volatile matter in the coal and the more rapid the heating, the more porous will be the resulting coke. Each shipment will contain material varying very considerably in this respect, owing to the fact that in different portions of the ovens different conditions of heat and pressure exist, the upper portions, especially in the by-product ovens, having the greatest amount of cell space. Moreover, the greatest number of pores tend to be produced in the closed retorts and the smallest number in the original meiler, a method now practically extinct. The influence of this subject upon the practice of the furnace and the foundry lies in the fact that the denser the coke the larger the pieces that can be used.

Moisture Injurious to Coke.

Moisture.—Coke shows only a slight tendency to absorb moisture from saturated air, the amount taken up by dry coke in this manner not exceeding one-half of one per cent. The conditions of quenching at the ovens is largely responsible for variations in the amount of water held by different shipments, and as the quantity held is of interest to the purchaser some attention should be given to the matter. At certain by-product ovens a quenching machine is used, but in general the coke burner sprays water upon the pile until it no longer appears red; and as the redness is more apparent at night it has been stated that coke quenched at night tends to contain more water than that quenched during the day. However that may be, marketable material should not contain above 3 per cent. An erroneous opinion exists among some foundrymen to the effect that better results may be obtained in the cupola when coke is wet, and some even go to the length of spraying it before charging. There are men of long and successful experience who claim that such practice is of considerable advantage, but it requires but little demonstration to prove the incorrectness of their position. For this reason, coke sheds for protecting the fuel against rain and snow are to be strongly recommended.

Volatile Matter.—Well-burned coke contains only a small amount of volatile material, usually between 1 and 2 per cent. Occasional tests in the experience of the writer have disclosed higher percentages, but they have been the exception.

Sulphur.—This unwelcome ingredient of all cokes is the one with which the foundryman in particular is most familiar, as it is the cause of many of his most positive troubles. Owing to the fact that the molten metal is in direct contact with incandescent coke both in the cupola and the blast furnace under conditions in which the affinity of iron for sulphur comes strongly into play a high percentage of that element is most objectionable. There are means at the disposal of both foundry and furnace man for minimizing the absorption of the sulphur by the metal, but they cannot be intelligently used, unless the percentage present in the coke is known, and in any event it is better to avoid the necessity of their adoption by ensuring the delivery of a low sulphur fuel. It is now universally the practice at blast furnaces to rely upon the protection afforded by analysis, but unfortunately it is not so generally the case in the foundry, and as a consequence no little trouble arises from this source. Hard castings and high shrinkage make their appearance from time to time, and more loss is incurred during a few casts than would pay for a full year's analysis. It is customary to purchase under a specification placing the maximum allowable content of sulphur at one per cent., but deliveries are frequently made in which this percentage is much exceeded—to the extent, indeed, of being more than doubled. One of the great merit of some grades of by-product coke is the very low content of this element, the amount running usually from one-half to three-quarters of 1 per cent.

Ash.—Less attention, as a rule, is given by the foundry man to the amount of ash contained in his fuel than the subject deserves, inasmuch as it has a very direct bearing upon his costs. The blast furnace manager gives it a greater place in his calculations, since he is fully aware of its influence upon the operations of his furnace. The effect of ash upon the quality of coke consists to a great extent in reducing the percentage of carbon, or, in other words, in reducing its heating power. The ash requires limestone to form it into a slag, and the slag requires additional fuel and blast to melt it. It is evident, therefore, that this is a matter calling for consideration. It is true that a certain minimum percentage is required in order to produce the requisite hardness, for supporting the burden of the charges, although this is of less interest to the foundry man than to the blast furnace manager, and the limits of 8 to 10 per cent. may be considered ample. The writer has met with coke delivered for foundry use which have proved to contain from 14 to 18 per cent., and the heating power of which was, therefore, correspondingly diminished. Here again the advantage of analysis becomes at once apparent, as an agent for the detection of an insidious loss that might otherwise pass largely unnoticed.

Heating Power.—In referring very briefly to this part of the subject, it may be explained that the common unit quantity of heat is that amount which will raise the temperature of one pound of water one degree Fahrenheit. This is known as the British Thermal Unit, and is written in abbreviated form B. T. U. Now, it has been pointed out in preceding paragraphs that the available heat from a coke depends to a large extent upon the amount of water and the percentage of ash which it contains. In the analyses which follow may be found the number of British Thermal Units per pound of coke in various samples tested by the writer. For regular foundry purposes, it is not necessary to make frequent tests of this value, as the tests for ash, etc., are sufficient. There are those, however, who wish to know as much as possible about their raw materials, and such may be interested in the figures submitted:

The analyses refer in all cases to the dried sample.

Kinds of Coke.	Volatile combustible matter	Ash. p. c.	Sulphur. p. c.	B. T. U. per pound
Beehive	1.38	9.90	.93	12771
"	1.51	10.46	.71	12148
"	1.61	10.56	.78	12104
"	1.03	12.92	.86	11525
By-product	1.38	7.30	.55	13915
"	1.88	7.03	.50	14277
"	1.88	8.63	.81	14161
"	1.76	12.76	.67	14925

In conclusion, it may be stated that close attention to the quality, in comparison with the original cost of their coke, will amply repay those foundrymen who will undertake it.

THE RISING TIDE.

WE are not alone in our growing appreciation of the urgent need of technical education. We know how hard and how constantly we have to fight to meet the competition of the United States at the present time. Yet the United States is even now taking thought how it can manufacture more skilfully, more rapidly, more economically. The competition of Germany's more highly trained workmen is shoving the United States gradually back, until it becomes patent to all that she must increase her efficiency. What will be our position when the United States commands an industrial army as efficient as that of Germany? The question is disquieting. We have no divine right to prosperity, any more than can be wrought out of the rich resources of our country by the labor of our farmers, our miners, and our artisans. We have the resources; are we going to take steps to produce citizens who can develop and refine those resources?

An association has been working in the United States for a year and a half on the subject of technical education. It is making progress, too. At the annual convention, recently held in Chicago, representatives were present from educationalists, manufacturers, and workmen. The objects of the Association are set out as being:

(1) To examine and report upon conditions in respect to industrial training in this country, and to compare them with those prevailing abroad; (2) to recommend types of model trade schools adapted to the needs of particular communities; (3) to propose methods by which these trade schools may be articulated with the existing system of public education.

Nothing is more admirable in the people of the United States than their supreme confidence in education as a cure for the ills of a democracy. The sight of business men who have themselves usually enjoyed few of the benefits of schooling, supporting with unquestioning faith the expenditure of millions of dollars for educational purposes, is inspiring. But if in the past they have done this for education as we now have it, with what enthusiasm may we expect that they will support technical education, which appeals to them practically, directly? The movement has but to get up a little momentum, and the artisans of the United States will have technical school in every hamlet. And the movement is even now under way.

The work of the Association referred to above is not merely of academic interest to us. It indicates the propagation of an idea which will be revolutionary from an industrial standpoint. What is to be our attitude towards it? Shall we adopt the easier part of waiting till the efficacy of industrial training is proved by our untrained workmen being pushed back to the cruder, the humbler lines of unskilled labor? Or shall we educate our citizens to efficiency? The question provides its own answer.

In the Public Eye

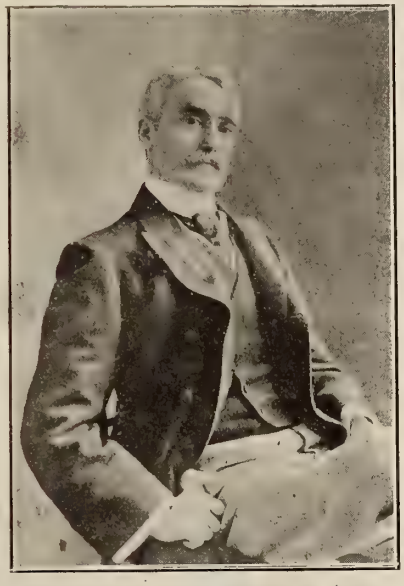
A MAN WHO HAS MADE GOOD.

THERE are only a few Government officers at Ottawa with whom the public are brought into close relationship. The estimates for a department are passed and the work is done, but the men who plan, and think and execute, remain in the background.

Some men, however, rise above the confines of the civil service, and by the excellence of their work make themselves an influence in some phase of the life of the country. Such a man is F. C. T. O'Hara, whose appointment to the post of Deputy Minister of Trade and Commerce, in succession to Mr. Parmalee, has just been semi-officially announced. Mr. O'Hara has for some years had charge of Canada's trade commissioners, and so has been the medium through which all inquiries and investigations on export or import trade have been made. Incidentally he has supervised and directed the publication of the weekly reports of the Department of Trade and Commerce. That he has done well will be gladly acknowledged by all who use those publications.



F. C. T. O'HARA
Whose appointment to the position of Deputy Minister of Trade and Commerce, at Ottawa, will give great scope to his abilities.



N. D. LEWIS
The pioneer in tin plate making in Canada, who is applying for a bounty on his product.

As will be seen from the accompanying cut, the new Deputy Minister is still a young man. His work shows energy and ability. The promotion of such a man is a practical exemplification of Civil Service reform which will appeal to the business public of Canada. The coming years will call for the keenest intelligence upon the part of those whom we have charged with the development of our commerce, whether it be in the way of getting information for Canadian producers as to the requirements of the world's markets or in developing the internal resources of the country. It is no reflection on the Minister, a considerable part of whose time is necessarily taken up in keeping himself in Parliament, to say that the initiative along the lines mentioned must emanate from the Deputy. It is a source of genuine satisfaction to know that Mr. O'Hara is made of the stuff which is not wont to yield under difficulties. The Department of Trade and Commerce will have its work cut out for it in the future. It is well to know that it is in good hands.



E. N. LEWIS, M. P.
The adoption of whose resolution favoring an export duty on pulp wood, would bring the mills of the United States to Canada



JOHN GALBRAITH
A member of the commission of three whose report on the Quebec bridge disaster is considered by engineers to be of far-reaching importance.

A PIONEER.

MR. N. D. LEWIS is General Manager of the Canada Tin Plate and Sheet Steel Company of Morrisburg, Ont. The path of the innovator is usually beset with thorns. The experience of Mr. Lewis is not different from others in this respect. He is now asking for a bounty of half a cent a pound on the output of his factory, and has called the Government's attention to imports which he maintains are in violation of the Dumping Clause of the Tariff Act.

The company of which Mr. Lewis is manager is the first, and so far the only, manufacturer of tin plate in Canada. There is a large demand for the goods, much more than the present plant can turn out; hence the application for a bounty rather than for a protective tariff. It is worthy of note that this industry is no more native to the United States than to Canada, yet in that country an immense manufacturing business has been developed under the aegis of an adequate tariff. In the days of the future, when Canada, too, enjoys the benefits of big tin plate mills, the work of Mr. Lewis as the pioneer, who hewed the first trail, will be recognized. In the meantime the progress of the industry will be watched with no small interest by the manufacturers of Canada.

A CONSTRUCTIVE STATESMAN.

FROM the great mass of chaff which is beaten day after day on the floor of Parliament, here and there a seed of grain is separated out. Such should be eagerly garnered, from its very oddity. In the Hansard report for March 11th, surrounded by questions of privilege, motions for returns, and arguments, which cover up the meagreness of material by a great plethora of words, stands out one speech which has meat in it. Mr. E. N. Lewis, member for West Huron, is constructive. While others were attacking others or defending themselves, he was working out a policy which would mean something to the country. The subject of his speech was a resolution, which he then moved, "That, in the opinion of this House, such a duty should be placed on the export of wood pulp as will be sufficent to induce its manufacture into paper in Canada, and thus save to the labour of Canada the six millions of dollars now lost."

His speech was a clear, cogent argument in support of his position. He quoted the opinions of bank managers, of publicists, of newspapers, both Canadian and of the United States. And ever he got back to the same well - defined proposition: Let Canada make her own paper. It is not necessary to summarize his remarks here. The newspapers throughout the country have featured them, and his point of view has been accepted by the great majority of Canadians as the correct one. It is a matter of dollars and cents; of developing a natural resource. Here is the proposition in a nutshell, to quote from Mr. Lewis' speech: "For every cord of pulp wood leaving Canada, $6 or $7 are left in the country. Watch the value grow afterwards. Every cord of wood ground to pulp has a value of $20. Every cord of wood made into fibre has a value of $30 to $32. Every cord of wood made into paper has a value of $40 to $45 and up." E. N. Lewis thinks we should keep the $45 in this country. In that he has pretty general support outside Parliament.

Unfortunately some of those sitting in Parliament depend for their election on the votes of small farmers in a comparatively limited area, who add to the profits from agriculture by selling pulp wood to American dealers. With an election not very far off, these members are most zealous in the interests of their electors. So, in the House there is a tendency to leave the subject severely alone. Public opinion will force an issue along the lines of Mr. Lewis' resolution.



HUGH GUTHRIE, M. P.

Whose motion for the appointment of a commissioner on technical education has been favorably received by all classes.

A BRIDGE EXPERT.

COMMISSIONS have become a rather common adjunct to government of late. It may be because the excellence of the system is becoming more generally recognized than before. Or, again, it may be that there are more things to be investigated. However that may be, the report just presented by the commission which was appointed to investigate the Quebec Bridge disaster, shows by its thoroughness what may be accomplished in this way. Not least of the members of that body is the subject of our illustration, Mr. John Galbraith, Principal of the Faculty of Engineering at the University of Toronto. Mr. Galbraith is an expert on bridge construction. He also has the conscientiousness that is characteristic of the school master. The two qualities combined were just the equipment required for an investigator into the Quebec affair. He could be relied upon to find out all that was worth knowing about the strength or weakness of the structure, most of which now lies, a tangled mass, at the bottom of the St. Lawrence —not to be turned aside by the recriminations of contending engineers, nor overawed by the dicta of experts.

Now that the defects in design have been located and it is worthy of note that such an eminent authority on engineering as the Scientific American accepted as undoubtedly correct the finding of the Commission — tests must be made on a large scale before other works of this kind are attempted. The failure of the construction will necessitate the establishment of new formulae for big bridges. So the work of the present Commission will have its influence wherever big bridges are to be built.

ADVOCATES A COMMISSION.

AT a recent sitting of Parliament, Mr. Hugh Guthrie, M.P., introduced a resolution favoring the appointment of a Commission to investigate and report on technical education. Mr. Guthrie on that occasion justified his reputation of being in the first rank of Ottawa Parliamentarians. His exposition of the subject was clear and forceful. The excellence of a speech may be judged by the influence it has over its hearers. By this stand-

ard this contribution of Mr. Guthrie to the Parliamentary debates measures up well with anything that has been given this session. There could be no doubt that when he sat down the House was convinced of the necessity of technical training in Canada.

The debate lengthened out, although there was no opposition to the resolution, until adjournment, when the resolution was dropped automatically from the order paper. Had it been possible to bring on a vote at the time, it would have carried easily. As it is, the subject can only come up again by its being substituted for some other motion farther down on the list. Mr. Guthrie has popular sentiment behind him in his advocacy of a commission of enquiry. Technical education will come in Canada before long, just as it has come in the countries which are more advanced industrially. In establishing such a system we should profit by the experience of others. Henec the need of a commission.

WILL INTRODUCE THE FAMILY.

One of the bigger movements within the Empire is marked by the publication of a new journal in England, The Standard of Empire, which comes in the form of a supplement to the London Standard. The Standard of Empire is directed towards a larger field than yet has been attempted by any publication. It embraces all parts of the dominions beyond the seas, and aims at giving the view-point of the various members of the great partnership. No worthier work could be undertaken. To the outsider it would appear that an understanding of the motives and aims of the various units would be impossible on the part of the other, frequently far distant, members of the family. That it is difficult, no one will question. But it is necessary if the Empire is to remain intact, and is to carry to consummation the great work of civilization to which she has been set. There is only one way in which kinship will continue to be strongly felt, and that is through acquaintanceship. By recognizing the problems and aspirations of each other, patience and sympathy will take the place of asperity and criticism. The Standard of Empire will tell the people of Great Britain and Canada how the Australians live, what their attitude is towards the great questions, social and political, with which they are face to face, and how their efforts towards material and spiritual progress are being rewarded. And the people of Great Britain and Canada will begin to place themselves in the position of the Australian, and a bond of sympathy is forged. So with Canada. We will become known to the rest of the Empire. The bigger sister, for geographical, climatic, racial, and other reasons, has had, and continues to have, problems to solve which are not understood by others. Perhaps an understanding of them may explain some national traits which at first glance are repellant. The new publication has great possibilities before it. That it will measure up too those possibilities is the hope of all Canadians.

Trained Consular Service.

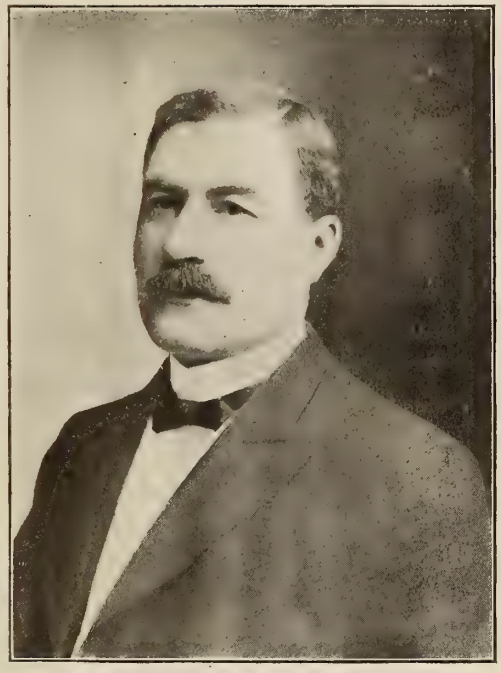
The need of special training for trade and consular appointees is being recognized in the United States, and a new department will be added to the University of Washington's course of studies to meet the requirement. The idea is being strongly supported by business men generally.

In the course of an article in the January issue of INDUSTRIAL CANADA, the statement was made that the Pickford & Black Steamship Company supplied a monthly service to the West Indies. As a matter of fact the Pickford & Black Company are supplying a twelve day service from the Maritime Provinces, and the service is one of great regularity, more so indeed than that of any single line running out of New York.

The New Chairman

Judge James Pitt Mabee has accepted the Chairmanship of the Board of Railway Commissioners for Canada. The appointment has met with uniform favor on all sides. The early report that he had declined the office brought forth such a chorus of journalistic regrets that the Government must have felt strengthened to make what arrangements were necessary to secure his services.

The rise of Mr. Mabee into prominence and recognition illustrates one of the advantages of a democratic state. Having the ability, his success was assured. As a practising lawyer in Stratford, he rapidly rose to a high position in his profession, a position which was recognized not alone in his own city and county, but throughout all Western Ontario. When he gave up the emoluments of his large practice to accept a judgeship, he only followed a precedent which has given to the Canadian bench, in spite of the insufficiency of the salaries, the very best men which the



Judge J. P. Mabee

legal profession has produced, and which has gained for the Canadian judiciary the deservedly high name which it has long enjoyed.

Mr. Mabee's work on the bench has been characterized by assiduity, keenness in seizing on the salient points of a case, and good judgment. Such were the qualities which were pre-eminently required in the Chairman of the Railway Commission. During the next few years the Commission will have abundance of work to do. The impending re-organization with an increase in membership will call for new methods of procedure. Meanwhile many important questions are pressing for solution. It will require all Judge Mabee's great organizing ability to get ahead of the work. The public have confidence that he will do so.

Who will be the additional colleagues of Judge Mabee, besides Dr. Mills and Mr. Bernier, the present commissioners, remains to be seen. If they measure up to the standard of the last appointee, they will be satisfactory.

WILL PROTECT SHIPPERS.

THE Railway and Transportation Committee in their last annual report submitted a resolution petitioning the Board of Railway Commissioners to provide and put into effect without delay some plan for penalties against the railway companies for failure, within a reasonable limit — first, to supply empty cars ; second, to haul loaded cars to destination ; and third, to place cars for unloading after arrival at destination, so as to secure to the public a prompt and adequate service within the meaning of the Railway Act. It was felt that if it is fair and in the public interest that a charge should be made when the cars are detained in loading and unloading, in order that they may be kept available for service, it is reasonable to expect that the railways should be subjected to a similar penalty when they delay cars, entailing serious loss to the public. The Railway Commission has authorized that all freight traffic in carloads or less, which is or is to be loaded or unloaded by the shippers or consignees shall be subjected as follows :—

"When cars are held under load or waiting loads beyond the free time allowed by the rule prescribed, for any reason for which the consignee or shipper is responsible, a toll of $1.00 per car per day of twenty-four hours or any part thereof, shall be charged to and paid by the shipper, consignee, or other party responsible therefor, in addition to all other tolls paid or payable in respect of the goods carried or to be carried in or on such car."

The property of such a charge under ordinary circumstances has not been disputed. Shippers recognize that in delaying cars in loading and unloading they are taking from those as well as themselves some of the facilities required by the commerce of the country. The reasonableness of making a just charge for the storage of property in cars, which the consignee fails to unload promptly, is conceded.

Whilst granting the point, we are of the opinion that there should be some reciprocal regulation, not with any desire to be placed in a position to demand $1.00 per car per day from the carriers in the case of their failure to furnish cars, or move them promptly, or place them for unloading as soon as they arrive at destination, but rather with a desire to be furnished with facilities to do business. With this in view, and believing that the Board was well qualified to recommend such legislation, and at the same time suggest some means for its applications, the resolution above referred to was heartily endorsed.

The Minister of Railways and Canals has recently introduced a Bill, entitled An Act to Amend the Railway Act with respect to Telegraphs, Telephones and the Jurisdiction of the Board of Railway Commissioners, Clause 10 of which provides for demurrage somewhat upon the lines asked for in our resolution. It is suggested that Section 284 of the Railway Act be amended by adding at the end thereof the following sub-section : "The Board may make regulations applying generally or to any particular railway or any portion thereof imposing charges for default or delay by any company in furnishing accommodation, appliances, or means as aforesaid, or not receiving, loading, carrying, unloading, or delivering traffic, and may enforce payment of such charges by companies to any person injuriously freely distributed amongst members of Parliament, it is affected by such default or delay : and any amount so received by any person shall be deducted from the damages recoverable or recovered by such person for such default or delay; and the Board may, by order or regulation, determine what circumstances shall exempt any company from payment of any such charges." It may be here observed that at no time has the Association suggested arbitrary legislation, but has simply asked for, on behalf of shippers, similar protection to that which is given the carriers.

In an argument against the proposals as to the penalties for delay in supplying cars contained in Bill No. 6, An Act to Amend the Railway Act, introduced by Mr. Maclean, of York, prepared on behalf of the railways, which has been sought to convey the impression that the Board now has the authority to impose demurrage. Evidence has been given of this from the fact that rules were promulgated by the Board in March, 1906, providing for additional tolls against the public. Since that time, notwithstanding the demands made for some reciprocal arrangement, the Board has not been clear that it has the authority to impose penalties against the carriers. In order, however, to make this clear the Government has introduced the above amendment. The argument referred to is more or less of a repetition of what has already been given to the public from the carriers' standpoint. The statement is made that large numbers of cars are frequently held at terminals to the order of consignees, causing congestion and delay in placing other cars for loading and unloading, and making it difficult to move trains through terminal yards. In fact, the attempt is made to throw the onus for delays upon shippers and consignees, the statement being made that while the volume of business is doubled and trebled very few merchants and manufacturers have provided adequate additional storehouse and warehouse accommodation and further unloading facilities have in very few cases been improved. This statement is not borne out by facts. The manufacturers have spent large sums in increasing their plants and facilities. It is only necessary to refer to the reports which have been made by the experts of the Railway Commission to show that the railways have not attempted to increase their terminals commensurately to the increased business of the country. The argument was prepared for a special purpose and whether or not it accomplishes its object remains to be seen. In this connection we quote from a recent report of a hearing before the Interstate Commerce Commission, as follows:—

"The time has gone by when the mere statement of a traffic opinion which cannot be supported by some assignable reason can be of much weight with this body. Further, if these traffic gentlemen would bring to that matter a tithe of the fertility of invention which they have exhibited in finding reasons that the order of the Commission cannot be enforced that objection can be overcome."

The public have not asked for any legislation against the railways which they do not consider justifiable. The only reason that can be assigned for the strong opposition on the part of the railways is probably due to the fact that they have legislated so long for themselves that any further suggested regulation defining their liability and duties to the public must be opposed at all costs.

The following statement from Sir Edgar Vincent, an English financial authority of a high order, who has just spent three months in a tour of this country, is most interesting: "I was especially impressed by the financial soundness of Canadian enterprises, and the thorough, sure way in which that country is developing. I know of no greater tribute to the confidence in Canadian methods than the fact that the Canadian Pacific Railway has been able to borrow $10,000,000 at a shade less than four per cent. The Government itself pays a little more than three per cent., and by way of comparison we have the New York Central paying a bit more than five per cent."

All-Year Car Ferries

Boats which ply between Canadian and U: S. lake ports winter and summer.

IN spite of the severity of the past winter, when trains were held up for days at a time by mountains of snow, regular navigation went on on most of the Great Lakes. The ferry service between Canada and the United States is little known, although it is carried on with a steadiness and continuity which would be creditable to a rail system. A glance at a map will show what a great saving in distance can be accomplished by means of ferries. To get from Central and Eastern Ontario to the Eastern States a long detour is necessary by way of Buffalo or Montreal, if an all-rail route is chosen. Yet, in addition to an extensive passenger traffic, there is an immense volume of business originating in the Pennsylvania coal fields on the one side and in the timber and ore fields of Ontario on the other, which calls for a more direct route than by either Montreal or Buffalo.

To accommodate this traffic two lines of passenger and car ferries operate all the year round. Between Prescott and Ogdensburg the Canadian Pacific Car and Passenger Transfer Company are running four ferries. The first is a straight passenger boat, with a capacity of 300. This boat makes ten round trips a day and plies with great regularity all winter. The other three boats are car ferries, the international, with a capacity of 5 cars; the Wm. Armstrong, with a capacity of 3 cars, and the new steel ferries, the International, with a capacity of 5 cars; the Wm. passenger accommodation. The latter vessel has just been completed in the shipyards of the Polson Iron Works, Limited, Toronto, within the last couple of weeks, and showed her ice-fighting abilities by cutting her way through the ice on Toronto Bay when it was at its thickest. These ferries make on an average fourteen trips a day, but frequently during busy seasons they run steadily day and night.

The Ontario No. 1, a cut of which is reproduced herewith, is operated by the Ontario Car Ferry Co., between Cobourg and Charlotte, on Lake Ontario, to connect the Grand Trunk with railway lines in the United States. The big car ferry has made between sixty and seventy trips between Cobourg and Charlotte, port of Rochester, since going into commission, carrying a cargo of 1,500 tons at every trip. It is stated that the duty paid at the Customs House, Cobourg, up to the middle of January amounted to something over $40,000.

It is expected that this new departure on the part of the railway will be of great convenience to shippers in Eastern Canada and the Middle States, as the saving in time of carrying freight will be considerable. It will obviate the handling of freight from the Pittsburg iron centres and the Pennsylvania coal fields in train loads at terminal points, which, it is admitted, are now much overtaxed. It is expected that cars can be shipped from Pittsburg to Montreal in three days, while at present cars occupy from one to two weeks en route. The same facilities will be afforded the transport of lumber and ore from Ontario. United States visitors to the Kawartha Lakes district will also find the ferry a convenience.



Ontario No. 1, G. T. R. Ferry, Cobourg, Ont. *Photo by Huston, Cobourg.*

The length of the new boat is 315 feet, beam 54 feet, depth of hold 20 feet, height between decks 17 feet, making her the largest car ferry of Canadian register. Twenty-eight loaded coal cars can be carried at once, while the vessel has been so powerfully designed and built as to enable her to run both winter and summer. Her speed is 15 knots an hour. There is also state-room accommodation for about one hundred passengers on the upper deck. The total cost is about $375,000.

In addition to these ferries operated in connection with Canadian railway systems, there is the St. Ignace, operated by the Michigan Central Railway, and also a ferry across Lake Erie, operated by the Pere Marquette Railway.

A Producer Gas Plant

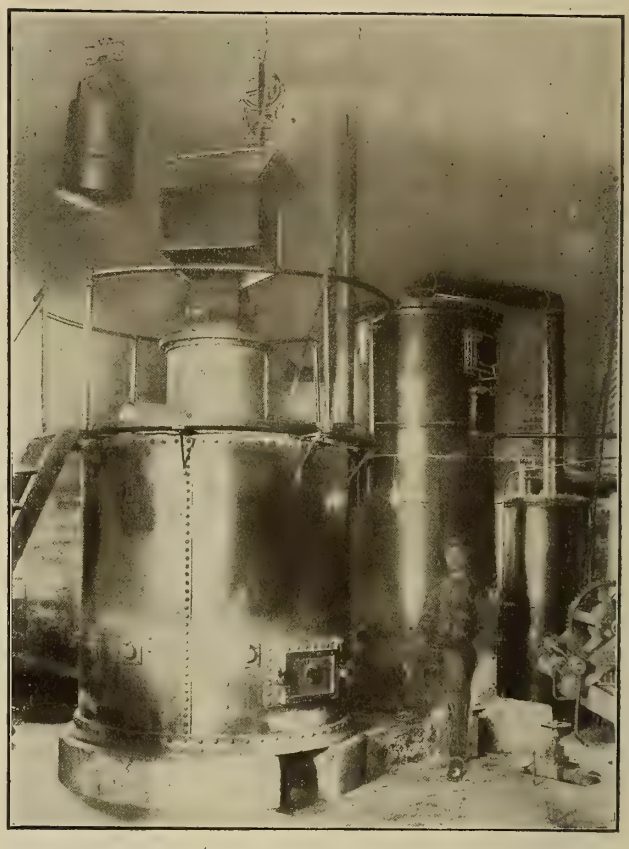
The McClary Mfg. Co. of London Have a Gas Power Plant in Satisfactory Operation.

THE McClary Mfg. Co. have recently added to their power plant an interesting gas power installation, which is now in operation in conjunction with their steam plant. The gas is supplied to the engine from a gas producer of the suction type, in which anthracite coal is used as fuel. The engine is of 200 horse-power, and is directly connected to a generator. Anthracite pea coal is used, and the approximate run for a ten-hour day is 2,400 pounds. The gas plant is arranged so that it can be run together with the steam plant, and furnishes power and light to the various parts of the works.

The engine is started with compressed air, which is turned off as soon as the engine gets under way. The compressed air for starting is stored in a tank supplied by a motor-driven air compressor. The speed of the engine is controlled by an ordinary ball governor, which acts on a valve, regulating the quantity of mixture admitted to the cylinders. The water supply for both engine and producer is taken from a large concrete cistern beneath the surface of the ground. Being first pumped up into an elevated tank in the roof of the building. The above-mentioned tank is connected with the city service by an automatic float valve, so that in a case of emergency the tank will be supplied automatically from the city service. The cistern is supplied from a small creek, which runs into the Thames River. Although the power plant is situated close to the Thames River, the water is taken from the above-mentioned creek, since at certain periods of the year there is considerable mud in the river water.

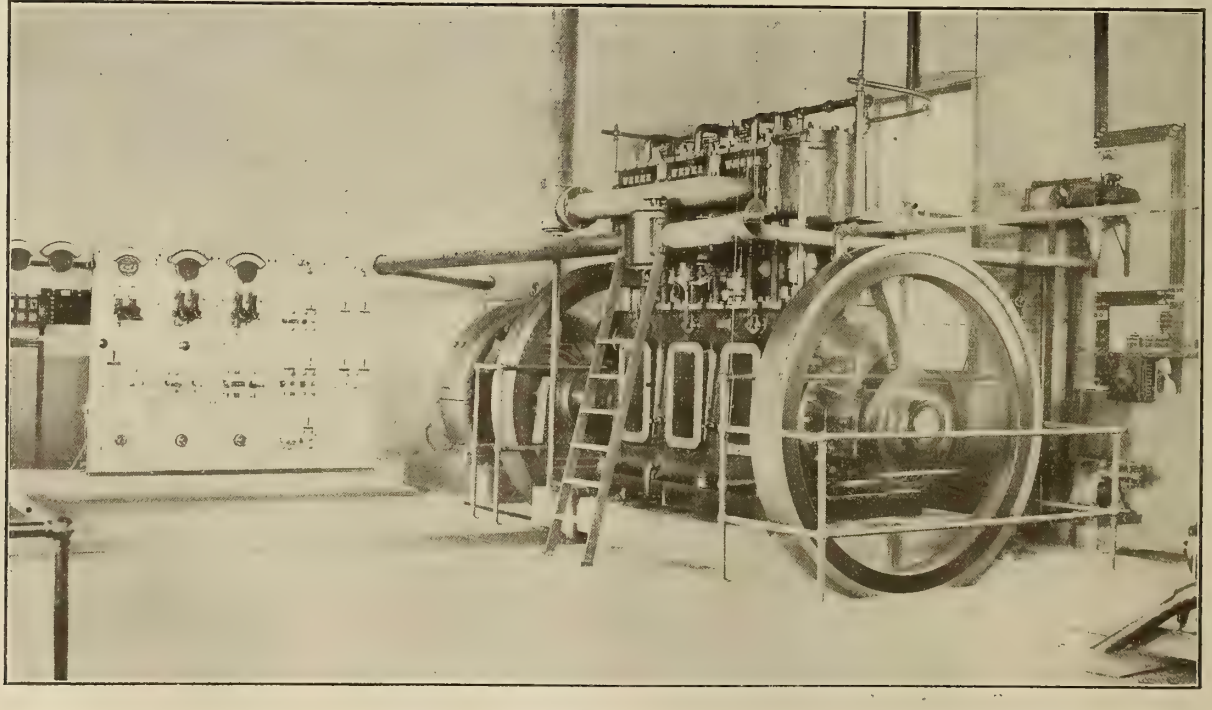
Considerable of the hot water which comes from the engine jackets is sterilized to feed the steam boilers in connection with the steam plant, so that much heat which would otherwise be lost is recovered in this way.

The producer is charged with coal from a hopper in the usual way, and the coal is elevated to the hopper by means of a specially designed bucket apparatus, so arranged that the fuel can be easily handled by one man. The producer is started by means of a fanblower arranged to discharge



Producer Gas Plant in Operation at the Works of the McClary Manufacturing Company, London, Ont.

air beneath the grate. There is also an exhauster located in the engine-room, which is used to boost up the fire after it is once started until the proper quality of gas is obtained in the pipes before the engine is started.



Producer Gas Plant

Foreign Market for Canadian Manufactures

AN EXPORT MARKET.

South America Does a Foreign Trade of $1,500,000,000—Opportunities for Getting a Share of This Huge Annual Business is Discussed by Mr. Wm. Johnson.

WHEN travelling through South America, visiting the different commercial centres, and doing business with the leading merchants, manufacturers, and railway companies there, I have often asked myself the question, How could the opportunities which presented themselves to me be so described to Canadian manufacturers that they would realize as fully as do manufacturers from all other parts of the world, the unlimited possibilities for trade with that continent? I felt satisfied that if this were accomplished, in a very short time the Canadian manufacturers products would be well distributed throughout the country, and that there would be developed such an export trade from Canada as would call for the enlargement and extension of their manufacturing and shipping facilities.

Already the United States have recognized the importance of the market. Every effort has been made to bring about a closer relationship and to increase the international trade. A department at Washington, with extensive offices, is devoted exclusively to this subject. The Director of this Bureau of South American Republics, at Washington, Mr. John Barrett, in describing what he called the Land of To-morrow, recently wrote to the manufacturers of the United States:

As Others See It.

"South America is a continent of vast and varied possibilities. The traveller and the scholar, or the merchant and the promoter, will find its peoples, problems, and potentialities, of compelling interest. And yet the ignorance prevailing generally throughout the United States in regard to this big southern continent is almost appalling. The average American, with all his close study of Europe and Asia, has neglected the history, growth, and characteristics of our sister republic. He has been so absorbed, moreover, by our own astounding material progress and our home politics, that he has given no heed to the industrial and economic movements, and to the administrative achievements of South America.

Now the whole world is beginning to turn its eyes southward. Europe has been gazing thither longer than the United States, and has results to show for her attitude. Even Japan, China, South Africa, and Australia are discussing more than we appreciate in the United States, the valuable opportunity for the extension of their commerce and trade with that wealthy, resourceful continent, which is so accessible by either the Atlantic or the Pacific. More attention is given by the press of Europe to South America in a week than by all the papers of the United States in a year. There are many signs of increased interest, however, throughout this country."



A Business Street in Sao Paulo.

An Unknown Quantity.

The North American does not stop to think, when he remembers the old geographical story about the beautiful harbor of Rio de Janeiro and the threadbare legends of yellow fever, that this capital of Brazil now has a population of eight hundred thousand, and is growing as fast as any big city on the northern continent; that it spent more money for public improvements last year than any city on the continent excepting New York; and that to-day it is one of the most interesting national centres of civilization, industry, art, literature, and education in the world.

Again, how many North Americans know that Buenos Ayres, the capital of Argentina, is the largest city in the world south of the equator; that it is the second Latin city, ranking after Paris, in all the world; that it now has a population of one million one hundred thousand; and is growing at an enormous rate?

If surprised at this statement, they might be interested to learn that in Buenos Ayres is the finest and costliest structure in the world used exclusively by one newspaper, the home of La Prensa; the most magnificent opera house of the western hemisphere, costing more than ten million dollars, and erected by the Government; the handsomest

and largest clubhouse in the world, that of the Jockey Club; the most expensive system of artificial docks in America, representing an expenditure of fifty million dollars.

Remarkable Railway Construction.

The North American railroad man may be surprised to learn that between Chile and Argentina is being constructed the longest tunnel in the world. The highest points and most difficult construction that have ever been encountered in railway extension are found in Peru.

The Story of Commerce and Trade.

The foreign commerce of South America tells a convincing story. It shows us that the field is of critical importance to our manufacturers and exporters. It proves that South America has awakened to a new life, and is buying and selling like any prosperous part of the world.

The total foreign trade—exports and imports—of the ten independent South American republics—Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela, and of the British, French, and Dutch Guianas—



View of Rio de Janeiro

exceeded in 1907 the sum of one billion five hundred million dollars.

Wonderful Progress.

Argentina's record in material progress rivals Japan's. With only six million inhabitants, Argentina astonished the world by conducting in 1906 a trade valued at five hundred and sixty million dollars, buying and selling more in the markets of foreign nations than Japan, with a population of forty millions, and China, with three hundred millions. Surely these are figures and results which should make us stop and think!

There are now nearly fifty million people living south of the Panama Canal, or a population equal to that of the German Empire. Immigration is pouring rapidly into Argentina, Brazil, Uruguay, and Chile. Nearly five hundred thousand Italians and Spanish immigrants landed at Buenos Ayres during the past year. The totals of Rio de Janeiro, Montevideo, and Valparaiso were, of course, much smaller, but they indicated a marked increase in the number of people leaving Southern Europe to seek new homes in southern and middle South America, where the climate is not at all dissimilar to that of their home countries.

South America is undoubtedly entering upon a new industrial movement. Its development during the next ten years will arrest the attention of the world. Its mining wealth and resources alone, especially those of gold, copper, silver, tin, platinum, and mitrate in the Andean States of Colombia, Ecuador, Peru, Bolivia, and Chile will require the investment of North American capital not unlike that already needed in Alaska and Mexico. If, as statistics certify, eight hundred million dollars of North American money have been placed in Mexico, there will be room for eight billions throughout the immense territory of all Latin America, from Mexico and Cuba to Argentina and Chile.

There is no limit to the demands upon capital for legitimate railway building, but the requirements for electric tramways, electric lights, for utilization of water-powers, for the erection of factories, water-supply plants, sewerage works, telephone and telegraph systems, for agricultural extension, stock-raising, and kindred undertakings, offer innumerable attractive opportunities for the personal or combined action and interest of North Americans.

Canada's Opportunities.

If, as stated by Mr. Barrett, the United States manufacturers have been neglecting their opportunities in South America, how much more have the Canadians, who, possessing a decided advantage over their United States competitors by reason of their being a part and parcel of the British Empire, should to-day have, and can have, if the business is undertaken and conducted on broad and progressive lines, an export trade to South America which would in a few years astonish the world. A Canadian travelling in South America requires no better letter of introduction or recommendation than his nationality. He is sure of receiving a cordial reception from one and all on whom he calls, and, by reason of the control exercised by the British communities in the different countries, his representations and efforts to do business will receive a very decided preference. It is only when travelling in foreign countries that we realize the full benefits of our position as part and parcel of the Empire. I look upon it as a great asset, and one which should be taken advantage of at the present time, when the opportunities for establishing an export business are ready and waiting. To the manufacturer, who realizes the possibilities of the business to be done with a population of fifty million people, enough has been said. The question, I take it, reduces itself to ways and means and whether they want any such increased demand for their products.

Among the Industries

A fruit cannery will be established at Chilliwack, B.C., with local capital.

The Selkirk Canning Company, with a capital of $40,000, has been organized at Selkirk, Man.

The Ottawa Paint Works, the building and stock of which were destroyed by fire recently, will be rebuilt at once.

A company will install a $100,000 plant to carry on dredging operations in the Fraser River, where gold is supposed to exist.

The Glencoe Knitting Factory, which has been temporarily closed, will be reopened under the management of Messrs. Hamilton and Hewitt, of Arnprior.

The Bell Thread Company will locate in Hamilton, Ont. They will occupy the premises formerly used by the Ontario Canning Company.

Trenton will shortly have a new industry in the shape of a large cooperage manufacturing plant. The company will be known as the Trenton Cooperage Mills.

The plant and buildings of the Canada Brick Company, Medicine Hat, Alta, were destroyed by fire recently. The plant was new and had just been in operation a few days.

It is announced that the litigation in connection with the rolling mills at Belleville has been adjusted, and that as soon as the plant is put in shape operations will be resumed.

The new Wolverine Brass Works, recently erected in Chatham, is now operating all its various departments, with the exception of the foundry, which is not yet completed, but will be in a very short time.

The directors of the British Columbia Agricultural Association of Victoria will have at their disposal, and will spend in new buildings, this year somewhere between thirty-five and forty thousand dollars.

Mr. J. J. Drummond has announced that the Londonderry Iron and Mining Company will spend $150,000 this summer in enlarging their plant. He expects the foundry will resume operations in the near future.

The Granby Smelter of Trail, B. C., will be enlarged this spring to a capacity of 4,500 tons a day. The smelter already employs 1,000 men, and this number will be materially increased when the changes contemplated are completed.

The Saskatchewan Power Company has been incorporated, with a capital of $1,000,000, to develop the power of the Saskatchewan River, at Saskatoon. This is in line with the general activity of the city in providing facilities for manufacturers.

The Canadian Brick Company of Medicine Hat will rebuild at once, after suffering a complete loss by fire. The plant had just been completed, and the first kiln of bricks has just been turned out when the fire occurred. Six thousand dollars will be spent on the new plant.

The Ontario Powder Company of Kingston is to build its permanent works at Stony Point, a quarter of a mile further away from Tweed, and will so buttress or barricade the plant as will not only ensure every means of safety in the works, but prevent a recurrence of loss of property in the village.

A plant for the manufacture of wood alcohol will be installed at Fenelon Falls shortly. Toronto capitalists are interested, and operations will be commenced on a large scale.

It is believed that satisfactory arrangements will be made between the city of St. John, N.B., and R. D. Isaacs, for the establishment of the car works, which has been under discussion now for some months.

The largest shipment of silver ever made from Canada has left the Consolidated Mining & Smelting Company's plant at Trail, en route to the Chartered Bank of India, Australia, and China at Hong Kong. The shipment consisted of 140,500.70 ounces, of nearly $80,000 value. The bullion weighed nearly five tons.

An agreement has been signed by American capitalists and the town of Campbellford, whereby the former, under the name of the Canadian Steel Rolling Mills, Limited, will erect a $60,000 plant for the manufacture of steel plate. Power will be supplied by the municipality at $10 per horsepower per year, besides tax exemption.

The Maple Leaf Milling Company of Kenora will rebuild in that city. The mill of this company, which when complete would have had a capacity of 4,000 barrels a day, was one of the largest on the continent. It is proposed to build a new mill as large as the one which was destroyed by fire.

The Ontario Government may erect a smelter at some central point to reduce and refine nickel ore. Now this work is done in the United States, and the small holders in particular are subjected to unfair tolls, and, generally speaking, are under a disadvantage in selling their product. A government smelter would materially improve conditions.

British-Canadian Smelters, Limited, of Toronto, have chosen a site near Chippawa, on the Niagara River, for their plant. They had intended building in Toronto, but suitable terms were not granted. The company will employ 500 men, and will do smelting and refining. The industry will take in the metal works of the J. E. Wilkinson Company of Toronto.

A company has been organized to carry on a ferry business between Brockville and Morristown, the result of an agitation which has been going on for some years on account of the previous poor service. The steamer H. P. Bigelow has been purchased, and the members of the company are Thomas L. Burns, Jr., Brockville; James J. Farrell and Charles E. Russell, Morristown.

The Marine and General Engineering Company, Limited, of Sydney, N.S., has been incorporated, with Messrs. M. B. Dickenson and John V. Calver as organizers. This company will undertake marine repairs in all its branches, the supply and repairs of mining machinery, building and structural work, boiler making, motor and electric fitings, together with the supply of castings and forgings in connection with the several branches above enumerated.

The Brockville Peat Works, where some seven or eight years ago machinery was installed and preparations commenced for using the bog, but which has since lain in a dormant state on account of the absence of a system of drying, is likely to commence operations soon. H. R. Graham, of Chicago, inventor of a quick-drying automatic apparatus, is here influencing capitalists. He has obtained an option on the bog.

An ore-reduction plant is contemplated at Bannock City, B.C.

A twelve-room brick school will be erected in Stratford, Ont., this year.

A large new freight shed will be erected in Victoria, B.C., by the E. & N. Railway Company.

Lymans, Limited, with a capital of $1,000,000, will manufacture drugs and chemicals in Montreal.

The Canadian Stewart Company, Limited, of Montreal, has been incorporated to do a general engineering business.

A $40,000 school building will be erected at Rockliffe, Ont., this summer. The Ashbury College Company of Ottawa are in charge.

The Grau Jewellery Company of Toronto will establish a plant at Guelph. Local capital will be interested in the extension of the business.

The Wilson Carbon Paper Company, Limited, has been incorporated with a capital stock of $20,000 and chief place of business Montreal.

A second fire station will be built in Regina this summer, at a cost of $10,000. It will be equipped throughout with hose wagon, ladders, etc.

The New Brunswick Iron Mines Company, Limited, has been incorporated, with a capital of $49,500, to carry on a general mining business in that province.

The citizens of Medicine Hat will expend $75,000 this summer on extensions to the water works system, the gas system, and on the erection of a new market building.

The Imperial Locomotive Works, Ltd., have purchased 100 acres of land at Lachine, Que., and will erect a plant to cost $2,250,000. The number of hands employed will be 2,000.

The Nichols Chemical Co., Limited, have increased their capital from twenty-five thousand to two hundred and twenty-five thousand dollars. It is intended to extend the business largely.

A steam auxiliary plant will be installed in Victoria, B.C., in connection with the proposed high pressure system, instead of a gas plant, as formerly decided upon. The total cost of the high pressure system will be $70,000.

The business of J. & R. Weir, engineers, boilermakers, and machinists, has been put into a joint stock company, under the name of J. & R. Weir, Limited, with a capital of $100,000. The new company will add shipbuilding to their other lines of activity.

Tenders have been called for the new Winnipeg union terminal station, for the G. T. P. and the Canadian Northern Systems. It will cost $2,000,000. Work will be commenced as soon as spring sets in, and it will be pushed to completion as rapidly as possible.

The municipality of Campbellford, Ont., has decided by vote to grant a bonus to the new steel works of the Canadian Steel Company. The company will erect a $60,000 plant at once. Cheap power and freedom from taxation will be granted by the town.

John Erwin, of Bridgetown, N.S., is organizing a company to build big iron and steel works at Fort Wade, N.S. English capital has been secured, and unless some unexpected discouragement is experienced, large building operations will be undertaken during the next couple of years.

The Robertson Machinery Co., Welland, will be taken over by the Capital Lock Nut Co., Columbus, O., who have decided to enter the Canadian field. It is understood that they will enlarge the plant at a cost of $100,000.

Gananoque will make additions to its water works system, including the installation of a new pump.

Providing they get a free site, a free building, and a $5,000 loan from the city, the Canadian Organ Company will establish a plant in London.

The London Concrete Machinery Co., London, will erect an addition to their building, 110 by 38 feet, two storeys high, and of cement construction.

Ketchum and Company have been incorporated with a capital of $100,000, and head office at Ottawa, to manufacture automobiles, motor boats, bicycles, trucks, etc.

The John Inglis Co., Toronto, have been awarded the contract for the new 15,000,000 gallon pumping engine at a cost of $147,530, and also the contract for a 6,000,000 gallon engine at a cost of $52,700, to be installed at the Toronto water works plant.

The American Can Company will establish a branch manufacturing plant in Canada. The intention is to spend a quarter of a million dollars on the initial building and equipment, and to employ 500 hands. The American Can Company is capitalized in the United States at $82,579,600.

HAVE COMPLETED NEW PLANT.

On July 25th last, Library Bureau of Canada suffered a complete loss by fire. Steps were immediately taken by the company to resume operations, and now buildings have been erected and a plant installed which places Library Bureau in a better position than ever to handle their business. In their new plant the buildings are arranged in the shape of a quadrangle, with an open court in the centre, giving light from all sides. At one corner the lumber enters the cutting-off room on transfer trucks direct from the dry kiln. The first machine through which the stock is put is a roughing planer to take off the rough outer surface and show the color and figure. The boards are then carefully sorted and matched. Two swing saws, a self-feed rip saw, and a 10-inch mooulder are also in this room. After the lumber leaves each one of these machines, it is piled on trucks ready to move forward to the next department, where are grouped the rest of the machines. This second room is 60 x 60 feet, and contains two planers, two shapers, two rip saws, two jointers, a chain mortiser, a 60-inch sander, and a single end tenoner. Here the lumber is made ready for the cabinet-makers to assemble. Upstairs over this room is the cabinet room, where the stock goods are made.

Going downstairs again, one enters a room running at right angles to the machine room and 130 feet long by 37 feet wide. Here bank counters and contract work are put together and set up. Eight large skylights make this room as bright as out-of-doors. Just off this room and between it and the machine-room, a glue room has been built, where special glue cookers have been installed, besides large veneer presses. On to the third side of the quadrangle is the finishing room, which contains the varnish room, built so that no draft can touch the work while being coated, thus preventing any chance of the varnish cracking.

The packing and shipping rooms follow this. They lead through a large fireproof door at the end of the building to the tracks of the Grand Trunk Railway, which has a siding into the works.

On the fourth side of this square is the boiler-room and machine shop.

An office building which contains the corporation offices, accounting and cost departments and drafting room, is about 50 feet distant from the main buildings. Besides the factory and a sales office in Ottawa, the company has two branches, one in Toronto and one in Montreal.

Trade Enquiries

NOTE.—For further information regarding any inquiry mentioned under this heading or the names of inquiries, apply by numbers to the Secretary, at Toronto.

478 **Agent or Assistant in Manufacturing Establishment.**—Young **American** with first-class business experience, thorough knowledge of French, is open to take position as selling agent abroad or in **Lower Canada** for first-class Canadian firm. Would also take position in manufacturing office.

479 **Agent.**—A **London firm,** possessing a connection among brush and broom manufacturers, would be pleased to act as selling agent for Canadian manufacturers who can produce bored boards for brushes; and also broom handles. The firm could also handle large quantities of dowels, and of chair legs cut to specification.

480 **Agency for Plumbago.**—An importing and distributing firm in the port of **Hull** (established 1876), with several representatives continuously covering the country, desire to secure an agency for the sale of plumbago.

481 **Agents.**—Inquiry has been made by a **London** firm for the names of Canadian firms who might be willing to appoint them as buying or shipping agents.

482 **Agency.**—A **Hull, Eng.,** firm, dealing in engineers' specialties, seeks the agency of a Canadian manufacturer of metallic packing.

483 **Agency.**—A well-known firm of import merchants in the port of **Hull** have made inquiry respecting the agency for a Canadian firm exporting mica.

484 **Agency.**—A London **firm** desires to secure the representation of Canadian produce exporters.

485 **Agency.**—A firm of wholesale produce importers and commission agents, in **South Wales,** is desirous of securing the agency of a first-class Canadian provision house, on commission.

486 **Agency.**—Inquiry has been received from a firm of general commission agents, in **Egypt,** for the names of Canadian produce exporters who may wish to be represented in that country.

487 **Agency.**—A **London** firm, stated to have a connection among papermakers in the United Kingdom, is desirous of taking up the agency of a Canadian exporter of wood pulp.

488 **Agency.**—A **Scottish** firm desires to secure the agency of a Canadian exporter of mica, molybdenite, etc. They are also interested in pulp wood.

489 **Asbestos, Copper, Etc.**—A **Glasgow** firm would be pleased to hear from Canadian producers of asbestos, copper, chrome, manganese and other minerals in demand. Samples should accompany quotations (with analyses).

490 **Asbestos Millboard.**—A **Glasgow** firm, with branches throughout England, asks for samples and prices of asbestos millboard from Canadian exporters.

491 **Asbestos.**—A firm of asbestos importers, manufacturers and merchants, well known to buyers in all parts of England, asks to be referred to Canadian shippers of crude asbestos, and also to manufacturers of asbestos yarns, powder and similar products.

492 **Automobiles.**—A report has come from **Trinidad, B.W.I.,** that there is a good opening in that island for Canadian automobiles of the smaller and cheaper makes.

493 **Barrel Staves.**—A well-known wholesale fruit agent and importer, in **London, England,** is in the market to purchase a cargo of staves suitable for Almeria (Spain) grapes; dimensions, 20 in. x 3-20 in. x 3-19 in.; excellent references; prices to be quoted c.i.f., Almeria, Spain. Can be made of any wood but oak or pine.

494 **Beeswax.**—A **Manchester** firm will welcome samples and prices of beeswax from Canadian shippers.

495 **—Broom Handles.**—A **Liverpool** firm asks for prices and dimensions of broom handles from Canadian manufacturers.

496 **Butter Patties.**—Manufacturers' agent in **London, Eng.,** is in the market to place an order with a Canadian firm for 145 gross wooden butter patties. Must be made of clear white wood, and well finished, and packed in 1-gross canvass sacks; delivery to be quoted c.i.f. Manchester, England; price 6s. 6d. to 7s. per gross. These goods are required immediately.

497 **Canned Lobsters, Whalebone, Cotton Goods, Leather, Provisions, Etc.**—Well-known commission agent, in **Paris, France,** desires to hear from Canadian exporters of the above and other lines suitable for French trade, who would be glad to do business through him; has had good experience, and is in touch with the best buyers in his territory.

498 **Canned Pears.**—A **Manchester** firm invites correspondence from Canadian exporters of canned pears.

499 **Casein.**—A **Manchester** firm wishes to correspond with Canadian exporters of casein.

500 **Casein.**—Inquiry has been received from a **London** firm desirous of importing from Canada from two to three thousand tons of casein per annum, for the names of Canadian exporters of this product.

501. **Cattle Food Ingredients.**—A firm in the port of Hull, closely connected with the cattle-feeding cake industry, makes inquiry respecting the prospects of securing supplies of bran, sharps, middlings, low-class flour, and such like ingredients, which could be advantageously used by manufacturers in this trade.

502 **Carbide.**—A **Birmingham** firm is open to purchase carbide for acetylene.

503 **Cheap Malleable Castings.**—An important Sheffield firm wishes to get into touch with firms in Canada who can supply them with cheap malleable castings.

504 **Church Furniture.**—A **South African** firm of wholesale and retail furniture dealers desire to communicate with Canadian manufacturers and exporters of church furniture.

505 **Cider.**—A **Birmingham** firm inquires for Canadian cider in quantities.

506 **Commission Agents.—Auckland, New Zealand,** firm of indent and commission agents, with good Toronto references, desire to hear from Canadian manufacturers of good quality boots and shoes, rubbers, book leather, also stained and grained basils and strapping leather, cotton goods, who could do business in New Zealand market. This is a good opportunity and further particulars may be had at this office.

507 **Copper Ingots.**—A **Manchester** firm wishes to correspond with Canadian exporters of copper ingots or bars.

508 **Cordage and Binder Twine.**—A **South African** firm of general merchants desire to be placed in communication with Canadian manufacturers and exporters of cordage and binder twine.

509 **Corn and Potato Starch.**—A **Manchester** firm asks for prices of corn and potato starch from Canadian manufacturers.

510 **Dried Fish.**—Inquiry has been received from a correspondent in **Malta** for the names of Canadian exporters of dried fish (cod, haddock, etc.)

511 **Decorating Mouldings.**—A **London** firm, possessing a connection in the cabinet-making trade, desires the addresses of Canadian manufacturers of machine-carved or pressed decorating mouldings, and also dowels.

512 **Farina.**—A **Manchester** firm asks for samples and prices of farina from Canadian manufacturers.

513 **Fencing.**—A **Manchester** firm desires to correspond with Canadian manufacturers of woven-wire fencing.

514 **Fencing.**—A **Manchester** firm wishes to correspond with Canadian manufacturers of woven-wire fencing.

515 **Fish Oils.**—A firm in the **North of England** inquires for importers and exporters in Canada of fish oils.

516 **Furniture.**—A **South African** firm of wholesale and retail general furniture dealers desire to communicate with Canadian manufacturers and exporters of household furniture of all kinds.

517 **Furniture, Woodenware, Paints and Varnishes.**—Commission agent in **Port of Spain, Trinidad,** is anxious to hear from Canadian firms who could quote on large orders of the above products; delivery to Port of Spain; payment monthly.

518 **Grey-Boards.**—A **Manchester** firm asks for prices of grey-boards from Canadian manufacturers.

519 **Handles.**—A **Liverpool** firm invites correspondence from Canadian manufacturers of pick and hammer handles.

520 **Handles.**—A **Liverpool** firm asks for prices of pick and hammer handles from Canadian manufacturers.

521 **Handles.**—A **Midlands** manufacturing firm would be pleased to receive quotations from Canadian manufacturers who are in a position to supply regularly broom and brush handles of various sizes and qualities.

522 **Handles.**—**Lancashire** firm, importing broom, tool and implement wooden handles, invites quotations from Canadian manufacturers who are in a position to contract for regular supplies.

523 **Harrows and Drills.**—A **Liverpool** firm asks for catalogues and prices of harrows and drills from Canadian manufacturers.

524 **Iron-Working Tools, Wood-Working Tools and Hand-Power Machines, Building, Wall and Writing Papers and Samples, Stationery, Oilcloths, Boots and Shoes, Stoves, Oil Cakes, Ironwork, Post and Lumber Crayons, Picture Frames, Oil-Machine and Petroleum-Wood Turnings and Woodenware.**—A general merchant in **Akureyri, Iceland, Europe,** is in the market to purchase small quantities of the foregoing articles from Canadian manufacturers. Shipment is his own port; payment in advance.

525 **Laths.**—A **Lancashire** firm asks for prices of plasterers' laths, sawn and split, sizes 1 1-8 in. x 3-16 in., from Canadian manufacturers.

526 **Lawn Mowers.**—A **Manchester** firm asks for catalogues and prices of lawn mowers from Canadian manufacturers.

527 **Linseed.**—A **North of England** firm, in close touch with the seed-crushing industry, invites Canadian exporters of linseed to furnish them with samples, prices and other particulars.

528 **Linseed Oil.**—A **Manchester** firm asks for prices of linseed oil from Canadian exporters.

529 **Linseed Oil Cake.**—An **Eastern Counties** firm asks for the addresses of Canadian manufacturers of linseed oil cake.

530 **Machinist Supplies.**—A **Manchester** firm asks for prices and catalogues of machinist supplies from Canadian manufacturers.

531 **Maple Rollers.**—Offers for immediate shipments of good sound quality maple blocks for mangle rollers are invited by an English firm of actual importers.

532 **Maple Roller Blocks.**—A **Keighley (Yorkshire)** firm invites offers from Canadian shippers of maple roller blocks, in the usual standard sizes, for clothes wringers and mangles.

533 **Marketable Commodities.**—A **Yorkshire** firm is desirous of getting into touch with Canadian shippers of such like commodities as hair, spetches, horns, hides, skins, oak bark, etc.

534 **Mica.**—A **Birmingham** firm is in a position to purchase mica from large shippers.

535 **Manufacturers' Representative.**—**Englishman,** who has been living some time in Canada, is anxious to return to his native land and represent Canadian manufacturers. Good Canadian and British references. Would go on commission or salary. Age 30.

536 **Manufacturers' Representative.**—Old-established firm of manufacturers' representatives in **London, England,** are desirous of acting as London agents to manufacturers in Canada. Have good offices, and are prepared to devote any amount of time demanded to the interests of their Canadian clients. Excellent references.

537 **Natural Alkali.**—Inquiry has been made by a **London** firm concerning the production of natural alkali (carbonate of soda) in Canada, and would like to hear from likely exporters of the same.

538 **Oak Scantlings.**—A **Hull** firm, importing large quantities of oak scantlings, inquires into the prospects of securing shipments from Canada, used for the making of wheel spokes.

539 **Oats.**—A **Manchester** produce firm would be glad to get samples and prices of oats from Canadian exporters.

540 **Office Furniture.**—A **South African** firm of wholesale and retail furniture dealers wish to correspond with Canadian manufacturers and exporters of office furniture.

541 **Oil Cakes.**—A **Hull** firm, which imports and distributes large quantities of linseed oil cakes, wishes to turn their attention to Canadian products, and desires to hear from a Canadian manufacturing firm, with a view to taking up their agency. Inquirants are well known to buyers in all parts of England, and can give a good turn-over.

542 **Ores.**—Inquiry has been received from a **Liverpool** firm for the names of Canadian exporters of molybdenite, antimony, lead, zinc, wolfram and other ores.

543 **Pine Doors.**—A **Hull** firm asks Canadian manufacturers of pine doors to state their lowest price for shipments.

544 **Pine Planks.**—Manufacturers' agent in **London, Eng.,** has large orders to place for cheap Canadian pine planks, 3 in. x 11 in., x 13 in., suitable for trunk interiors. This is a good opportunity for a firm having some tools to dispose of. Quotations c.i.f. London.

545 **Provisions, Lumber, Etc.**—An **Egyptian** firm has asked for the names of Canadian exporters of provisions, canned lobsters, lumber, etc.

546 **Pulleys.**—A **Manchester** firm wishes to correspond with Canadian manufacturers of wood split pulleys.

547 **Ploughs.**—A **Liverpool** firm asks for catalogues and prices of ploughs from Canadian exporters.

548 **Pine Doors.**—A **Liverpool** firm asks for prices and dimensions of pine doors from Canadian manufacturers.

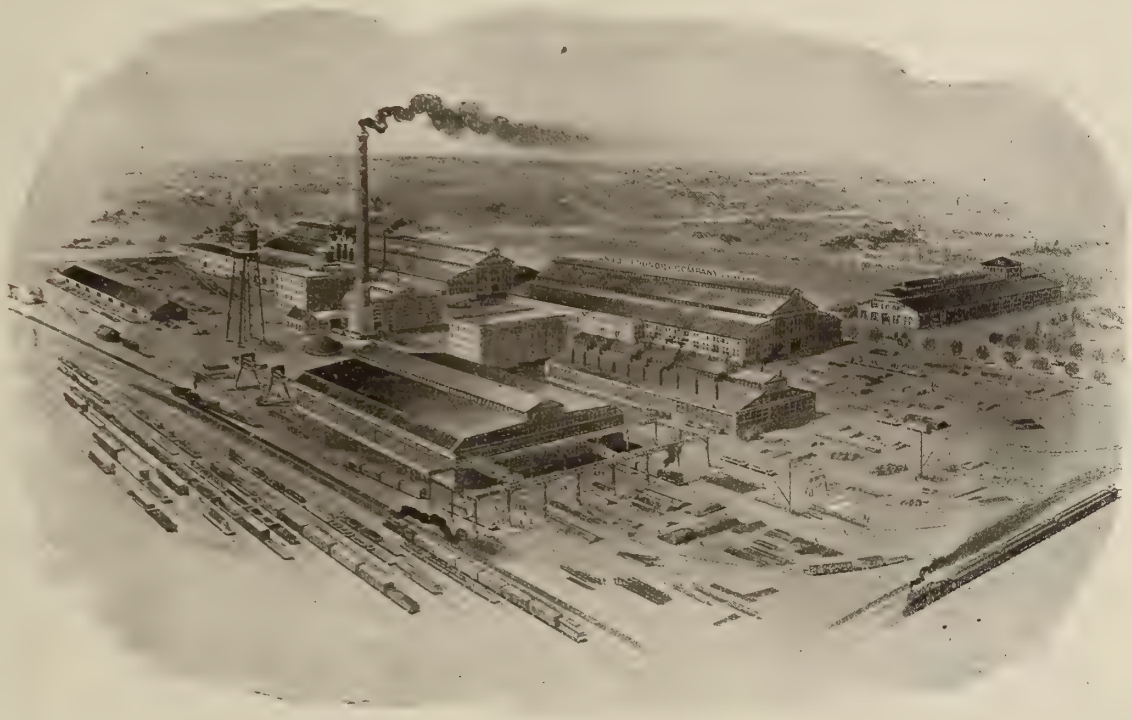
549 **Printing and Other Papers.**—Reliable **English** commercial man is anxious to hear from Canadian paper manufacturers who could appoint him their selling representative in Great Britain. Has had considerable experience as representative of a good German firm and knows all the large buyers of Great Britain.

550 **Plumbago, Mica, Etc.**—A **London** export, import and commission firm, who possess an established connection among buyers of minerals in the United Kingdom and on the Continent, invites correspondence from Canadian producers of plumbago, mica and other minerals in demand.

551 **Round Birch Dowels.**—A Midlands manufacturer of furniture invites quotations from Canadian manufacturers who can supply round birch dowels, 7-8 inch to 1 inch.

CANADA FOUNDRY CO., Limited

Head Office and Works, TORONTO, ONT.



DAVENPORT WORKS

Manufacturers of Locomotives, Steam Shovels, Air Brake Equipment, Railway and Highway Bridges, Structural Steel Work, Cranes, Boilers, Horizontal, Upright and Locomotive; Injectors, Pumps, Condensers, Compressors, Heaters, Separators, Tanks, Water Towers, and Riveted Steel Plate Work of all kinds, Waterworks' Supplies, Valves, Hydrants, Cast Iron Pipe, Gas Producers, Gas Engines, Oil Engines, Ornamental and Decorative Iron Work of Every Description.

District Offices:

MONTREAL HALIFAX OTTAWA WINNIPEG VANCOUVER ROSSLAND

552 **Staves, for Barrels.**—A **London** firm desires to get into touch with Canadian manufacturers and exporters of wooden staves for barrels. These barrels are for the packing of grapes, and should be of beech or other suitable wood.

553 **School Furniture.**—A **South African** firm of wholesale and retail furniture dealers desire to be placed in touch with Canadian manufacturers and exporters of school furniture.

554 **Starch, Molasses, Etc.**—Inquiry has been received from a firm in Scotland for the names of Canadian exporters of goods likely to interest drysalters, wholesale grocers and biscuit manufacturers. They are specially desirous of importing starch, cane syrup, glucose, dried fruits, molasses, canned apples, etc.

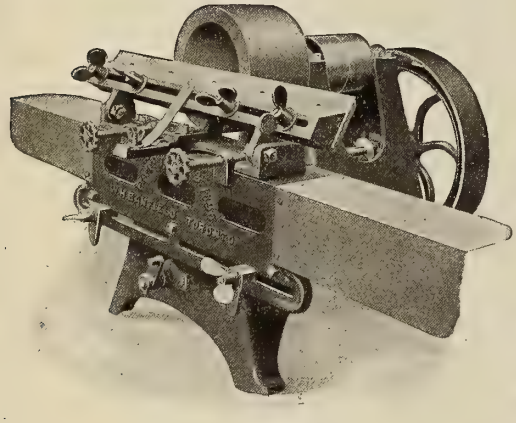
555 **Straw-Boards.**—A **Manchester** firm asks for prices of straw-boards from Canadian manufacturers.

557 **Tanning Material.**—A **Hull** firm of commission merchants, well known to tanners in the North of England and Scotland, desires to hear from Canadian exporters of any kind of tanning material.

558 **Vulcanized Fibre.**—A **Manchester** firm wishes to correspond with Canadian manufacturers of hard vulcanized fibre for electrical purposes.

559 **Western Canada Representative.**—Well-known Western traveller is open to represent Eastern Canada houses in the Western Provinces, particularly **British Columbia.** Has first-class connections and references.

560 **West Indian Representative.**—A young and energetic **West Indian,** well acquainted with the various Islands and **British Guiana,** would like to secure a position, on salary, as travelling representative for a Canadian firm, or for a syndicate desirous of introducing their goods into these markets. Good testimonials and reliable references. For fuller particulars, please address the Secretary of the Association.



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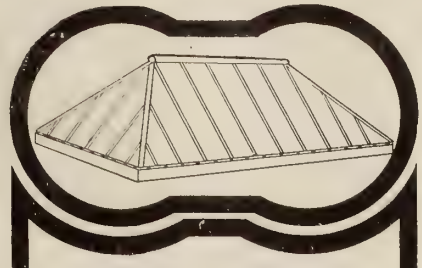
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may be easily and quickly applied to any frame structure, in any weather. Can be used over cheap or old weather-beaten lumber and will make the building warm and weather-proof, handsome, durable and fireproof.

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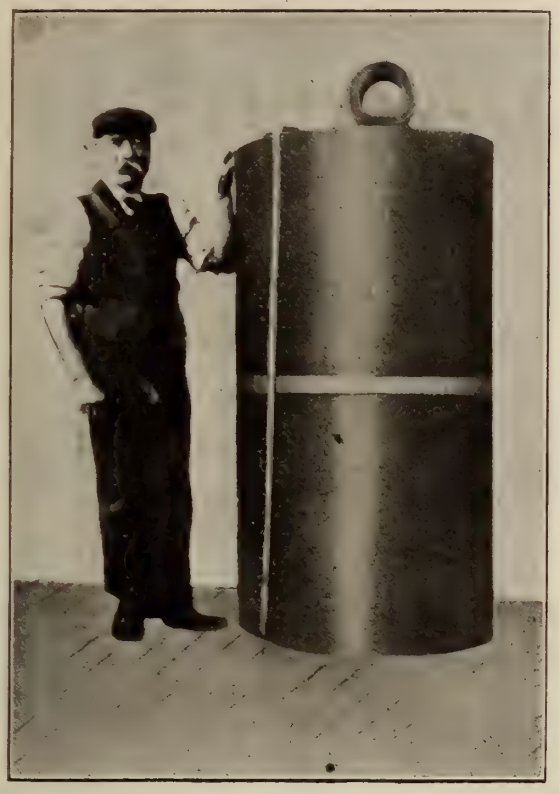
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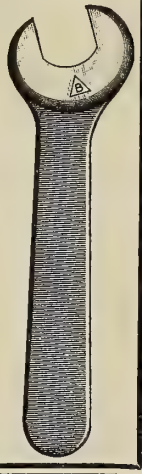
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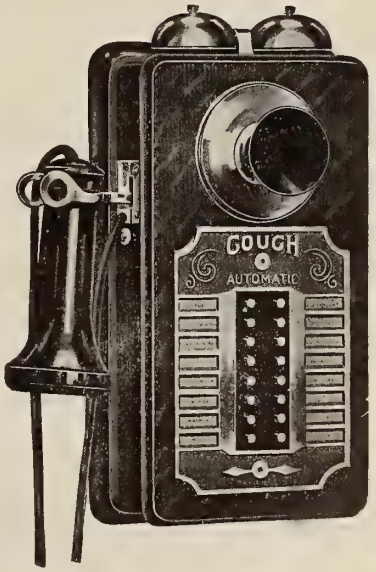
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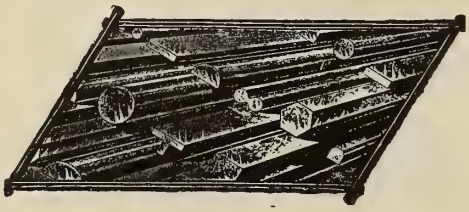
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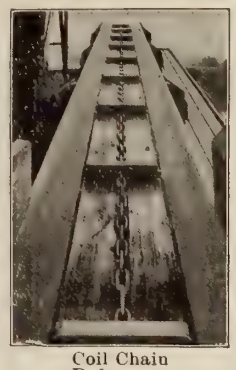
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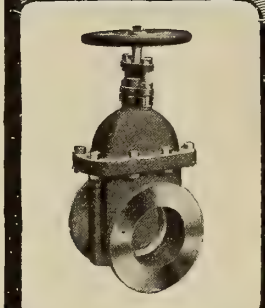
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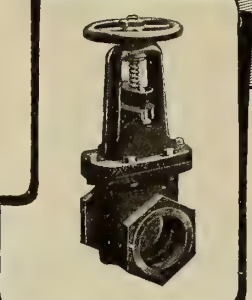
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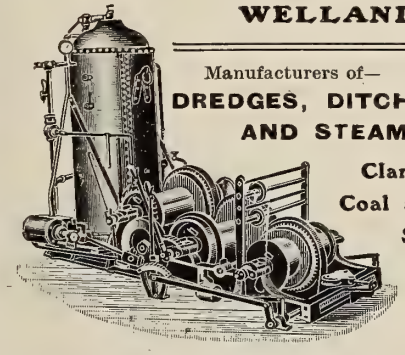
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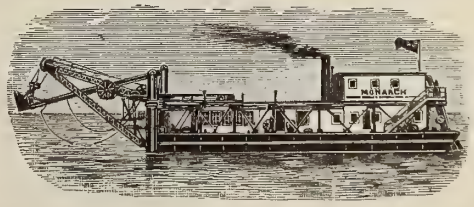
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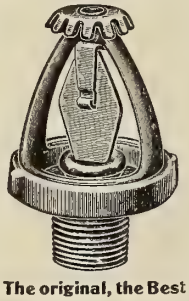
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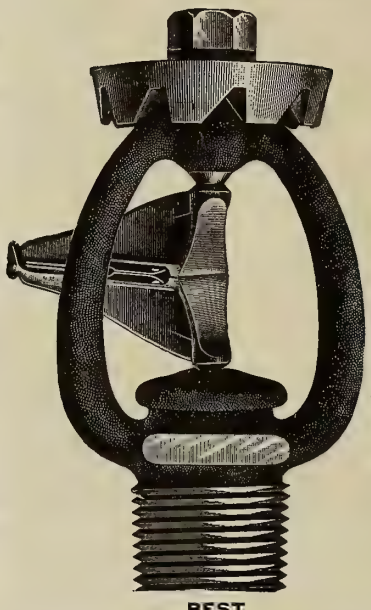


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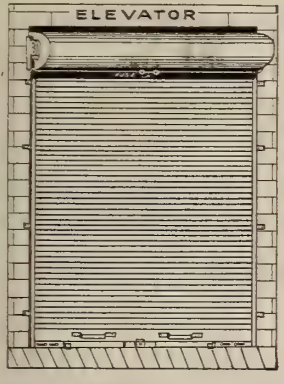
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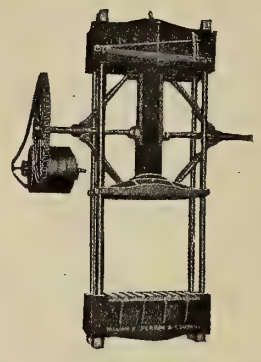
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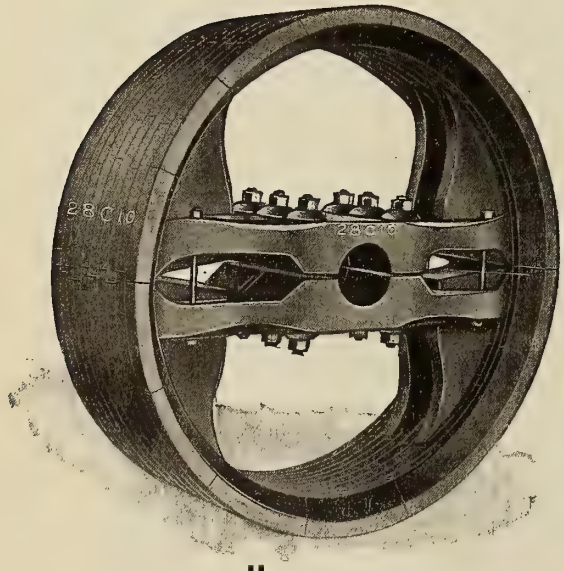
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Company, Limited,
TORONTO, Canada.

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MADE IN CANADA MADE RIGHT

The Canadian Fairbanks Co.

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Executive Council

MARCH MEETING.

Council Meets at Montreal.—Resolution of Regret at Death of Hon. A. C. Killam.—Fake Publishing Scheme Exposed.—Application of Canada Tin Plate and Sheet Steel Co. for Bounty on Tin Plate.—Discrimination in Duty Imports.—One-sided Tariff Arrangement at Detroit River Tunnel.—New Members Enrolled.—Progress of Industrial Canada.

EXECUTIVE COUNCIL.

The regular monthly meeting of the Executive Council was held in the Board of Trade, Montreal, on Thursday, March 19th, at 3.30 p.m.

The Hon. J. D. Rolland presided, and there were also present: Messrs. John Baillie, Montreal; C. C. Ballantyne, Montreal; Fred. Birks, Montreal; Wm. Cauldwell, Montreal; James Davidson, Montreal; J. S. N. Dougall, Montreal; W. R. Dunn, Hamilton; George Esplin, Montreal; S. W. Ewing, Montreal; Joseph Fortier, Montreal; Robert Gardner, Montreal; T. S. Hetherington, Quebec; J. Hewton, Kingston; Jos. Horsfall, Montreal; J. M. Jenckes, Sherbrooke; J. J. McGill, Montreal; Robt. Munro, Montreal; J. P. Murray, Toronto; L. H. Packard, Montreal; W. H. Rowley, Hull; George W. Sadler, Montreal; J. H. Sherrard, Montreal; Louis Simpson, Valleyfield; Wm. Smaill, Montreal; R. J. Whyte, Smith's Falls; W. H. Wiggs, Quebec; R. C. Wilkins, Montreal; Dan Wilson, Collingwood, and W. H. Wyman, Montreal.

COMMUNICATIONS.

Communications were reported as follows:

1. From the following members of the Council, regretting their inability to be present: Messrs. D. Morrice, Ed. Freyseng, J. O. Thorn, Arthur W. White, J. W. Cowan, Jas. McLauchlan, Wm. Stone, J. B. MacLean, Thomas Findley, H. Cockshutt, J. H. Housser, R. McLaughlin, C. C. L. Wilson, W. B. Tindall, George Booth, A. S. Rogers, S. B. Brush, J. C. Casavant, E. G. Henderson, F. E. Leonard, W. K. George, G. A. Vandry, C. H. Waterous, and John Hendry.

2. Srom the Brunswick-Balke-Collender Co., Toronto, calling the attention of the Association to the growing agitation for license reduction. Their letter pointed out that industries employing over $28,000,000 of capital were directly affected by the movement. These in turn consumed large quantities of raw material produced in Canada, furnished employment to many thousands of working people, and distributed annually immense sums of money in wages. The letter concluded by suggesting that the Association should appoint a small committee, the members of which might be selected from the interests directly affected,whose duty it would be to bring about a national organization of those engaged in the hotel supply trade.

After a good deal of discussion it was decided to instruct the Secretary to advise the Brunswick-Balke-Collender Company that the Council regretted its inability to act.

3. From the Vancouver Board of Trade, enclosing copy of a resolution favoring the imposition of a duty of $2.00 per M. on lumber, and asking the Association to endorse same. In the absence of any recommendation from the Tariff Committee, who had not had an opportunity to consider the request owing to the date at which it was received, it was decided to hold the matter over for their consideration and report.

4. From the Lord Mayor of Sheffield, thanking the Association for its assurance that the Sheffield Choir would be accorded a hearty welcome on its visit to Canada.

PRESIDENT.

The President reported that he had attended the Annual Meeting of the Canadian Forestry Association, whose work should appeal to every manufacturer in the country. He referred very briefly to the value of our forests as a means of preserving our water powers, and expressed the hope that the members of the C. M. A. would individually take a deeper interest in the splendid work which that organization was carrying on.

TREASURER.

In the absence of Mr. Booth, the Treasurer's report was presented by the Secretary. It showed receipts for the month of February of $3,568.32 and disbursements of $3,638.20, leaving a balance on hand of $15,077.14. The Secretary quoted from a letter written him by the Treasurer, as follows: "As intimated at our last meeting, our present expenditures are just about equal to our revenue from members' fees, and the proposed expenditure to be incurred through the establishment of a Tariff Department will be provided for out of our surplus."

FINANCE.

The report of the Finance Committee recommended for payment the customary monthly expenditure, totalling $1,007.49. It endorsed the action of the Montreal Branch in securing a renewal of the lease of their quarters for another year at a rental of $550, and authorized the Secretary to purchase an improved duplicating machine at a cost of $275. It further provided for the advance of expense money to officers of the Association when travelling exclusively on Association business. It also suggested that it be made a part of the duty of the Branch Secretaries to furnish "Industrial Canada" with a monthly letter.

PARLIAMENTARY.

Among the matters dealt with in the report of the Parliamentary Committee were the following:

Eight-Hour Day Bill.

A determined fight was being waged against this measure not only by the Association, but by other organizations, with the result that the Committee had satisfied itself that it had not the slightest chance of becoming law. At a previous meeting it had been decided to launch out on a campaign of circularization similar to that followed last year, but this was now considered unnecessary.

Bill Respecting Co-operation.

At the request of the Retail Merchants' Association, the Committee had decided to ask the Senate to refer the above measure on its second reading to a special committee in order that the views of all parties concerned might be heard and the matter thoroughly investigated. The pith of the bill was that seven persons or more might form a society without any cost, simply by filling out a schedule and depositing it with any postmaster in Canada. On being approved by the Minister of Labor, the society was given nearly all the rights of a joint stock company, and could carry on any business or trade, whether wholesale, retail, or manufacturing. The object was to do away with the middleman, and if general advantage were taken

of the Act the business of manufacturers would be seriously encroached upon.

RAILWAY AND TRANSPORTATION.

The Chairman, Mr. W. R. Dunn, presented the report of the Railway and Transportation Committee.

Referring to the death of the Honorable A. C. Killam, it recommended that the Association place itself on record in the following terms:

"The Executive Council of the Canadian Manufacturers' Association desires to place on record its profound regret at the untimely death of the Honorable A. C. Killam, Chairman of the Board of Railway Commissioners for Canada, and its deep sense of the loss thereby sustained by the shipping and transportation interests of the country at large.

"The high order of legal attainments, the unwearying industry, and the absolute integrity which he brought to the discharge of the numerous and arduous duties attaching to his important office render the loss exceedingly great, while his unfailing courtesy adds to the loss a personal tinge that causes it to be keenly felt by everyone who has had occasion to appear before him.

"In recording its appreciation of this splendid devotion to the service of his country, the Executive Council also desires to extend its sincerest sympathy to the widow and family of the deceased in their sad bereavement."

The adoption of this resolution was carried unanimously by a standing vote.

International and Toronto Board of Trade Rate Cases.

An application to the Railway Commission was made by the railways asking that Clause "H" of the order of the Board of July 6, 1907, which reads as follows: "That no special commodity rates now existing, which may be lower than the corresponding class tariff rates herein prescribed, shall be advanced by reason of the changes herein ordered, or without the sanction of the Board," be eliminated. The railways claim that this clause prevents them from making such reasonable changes in the tariffs as are usually found consistent. It was pointed out that in the readjustment of rates nearly all of the winter commodity rates had been automatically cancelled by the new lower class tariff rates. A few remained, however, but they were so close to the new class tariffs that the necessity for their existence seems to have disappeared. It was also considered that the continuance of these rates would constitute undue preference within the meaning of the Railway Act, resulting in a disturbance of the uniform basis of class rates ordered by the Board of Railway Commissioners.

A request was also made for permission to revise the minimum weights in the Canadian Classification, so as to make them as nearly uniform as possible with those in the United States Official Classification. It was represented that this was essential to the success of the international rate plan in the International Rate Case. It was thought that no serious objections would be taken to this as the increased minimums now apply under the Official Classification to all traffic to and from Canada.

The Manager of the Department attended the hearing in Ottawa and protested against the elimination of the above clause, or any change in the Canadian Classification which would bring about an increase in the minimum weights. In view of this the Commission took no action in regard to the elimination of Clause "H," but suggested that the railways, the Chief Traffic Officer of the Board, and the Manager of the Department discuss the matter and endeavor to come to some understanding. Meetings have since been held, and it is expected that a satisfactory conclusion will be come to. It was also stated by the Board that there might not be the same objections to increasing the minimums on purely international traffic, as the idea of introducing it all over Canada for domestic traffic.

Reorganization of the Railway Commission.

The appointment of a new Chairman and the new members to the Board, as provided for in the legislation now before Parliament, practically means a new Commission. It is desirable in the reorganization of the Board that the procedures of the Commission be kept as informal and free from the formalities of courts as possible. Your Committee suggests the advisability of acting in conjunction with the executive officers to take necessary steps to see that the appointments to the Commission and amendments to the Railway Act are satisfactory to the Association.

Advance in Cartage Charges.

This matter was carefully considered by your Committee, and whilst it fully recognizes the importance of the advance in rates for the service as performed by the railways, as it was a question of local service, and affecting certain sections only, it was felt that the Association could not take any action. The payment of cartage imposed by the railways is optional with the consignee, the Railway Commission having so ruled

Reciprocal Demurrage.

In view of the recent amendments proposed to the Railway Act, the Government was again communicated with in regard to reciprocal demurrage. Assurance was given which was considered very satisfactory.

Changes in Classification.

A number of important changes in classification have been under negotiation with the railways for some time. Certain advances have been suggested to which objection have been taken by the Department. It is expected that they will be disposed of at an early date.

COMMERCIAL INTELLIGENCE.

The report of the Commercial Intelligence Committee, which was regularly adopted, read, in part, as follows:—

Weights and Measures.

In answer to a letter addressed by the Association to the Secretary of the London Chamber of Commerce, enquiring whether any action had ever been taken by His Majesty's Government along the lines of the resolution introduced by the C. M. A. at the Sixth Congress of Chambers of Commerce of the Empire, with respect to a Royal Commission on the subject of Weights, Measures, and Currency, a communication has been received reading as follows:—"I beg to say that, as a result of this and other pronouncements on the subject in influential quarters, the Weights and Measures (Metric System) Bill was introduced into Parliament in March last year, but was thrown out on the second reading. For the moment, therefore, the question seems to be dead. It may interest you to learn that, about the same time, the Association of Chambers of Commerce of the United Kingdom threw out a resolution on the subject after having passed regularly, at its biennial meetings for some years, resolutions in favor of the metric system."

Imperial Cable Service.

Your Committee has looked carefully into the proposal —which is being fathered by the Ottawa Board of Trade— to secure State co-operation and control in the matter of a single globe-girdling system of telegraph lines by sea and land, and has pleasure in recommending that the Association not only place itself on record as being heartily in sympathy with the proposition, but that it aid in giving publicity to the same through the columns of "Industrial Canada."

Festival Album—Quebec Tercentenary.

Since the last meeting the Secretary has had occasion to look into the proposition of one J. O. Leger, New York Life

Building, Montreal, who is going to issue a festival album to commemorate the Quebec Tercentenary. It purports o be gotten out under the auspices of a large number of minent gentlemen, some of whom have been communi- d with, only to state that they know nothing about the ation and never gave permission to use their names. mbined with the exceedingly high advertising rates, our Committee to conclude that the scheme is one bers should look into very carefully before obligat- es in any way. It is proposed that a circular on issued at the earliest opportunity.

ries and Books of Commercial Reference.

teady increase in the number of enquiries that reach the office for information regarding foreign markets, it is suggested that the library be equipped with trade directories and books of general commercial reference on those countries with which Canada is most likely to do business. A partial list of such books has already been drafted by the Secretary, but to cover all probable requirements it is thought that an appropriation of $100 might be voted, to be drawn on as required.

It is further suggested that a synopsis be published, either in booklet form or in "Industrial Canada," of the regulations regarding the taxation of commercial travellers in the principal countries of the world, as well as of the various provincial statutes imposing taxes on extra-provincial corporations.

Referring to the Quebec Tercentenary Festival Album, the Secretary pointed out that in the "Montreal Star" of March 18th, the questionable methods adopted by the publisher had been fully exposed. Under the circumstances, therefore, he presumed it would be unnecessary to circularize members on the subject.

TARIFF.

The report of the Tariff Committee, as presented by Mr. Munro, read, in part, as follows:

Undervalued Pianos.

Attention has been directed to an effort of the Kruff Piano Company of Fall River, Mass., to dump their surplus production of pianos on the Canadian market. Circulars have been issued broadcast to the music trade in this country advertising mahogany veneered uprights at as low a price as $81. This matter has been brought to the attention of the Chief Inspector of Customs, who has promised to investigate it promptly.

Bounty on Tin Plate.

A communication has been received from the Canada Tin Plate & Sheet Steel Co. of Morrisburg, asking the Association to endorse its application to the Government for a bounty of ½c per pound on its entire production of tin plate. Your Committee is of the opinion that the policy of granting bounties is one that should only be entered upon with extreme caution, and very careful enquiries will first be made among members of the Association who are likely to be affected, before giving the Morrisburg Company an answer.

Colored Cotton Wool Waste.

Complaints have been received that cotton wool waste of assorted colors is being imported free through certain ports, whereas it is made dutiable when brought in through certain other ports. Your Committee believes that this material which consists of scraps of various colors all mixed in such a way that it would be unprofitable to separate it ought to come in free, but as the tariff now stands it is clearly dutiable. It is recommended that when the new Department is created the services of the Association be lent towards securing an amendment to the Act, which will take care of importations of this kind.

Imitation Horse Hair.

In behalf of one of our members from the Province of Quebec, a complaint has been taken up with the Department regarding the rates of duty applied respectively to an imitation horse hair yarn, and the braid made therefrom. On the strength of a ruling given by the former Assistant Commissioner of Customs, that the yarn would be dutiable at 20 per cent. and the braid at 35 per cent., the firm in question purchased a plant to manufacture this article, only to find after a year's operation that a new ruling had been issued allowing the braid to come in free. Meanwhile, the yarn was continued dutiable at 20 per cent. The matter was gone into personally by the Secretary with officials at Ottawa, with the result that the braid is to be restored to the old duty of 35 per cent.

Detroit Tunnel.

Further investigations into the above matter disclose the fact that the arrangement is even more one-sided than at first supposed. The total importations of United States material coming into Canada free of duty for the purposes of this tunnel amounted to $148,000 up to the first of March, whereas from correspondence with the Department at Washington, it would appear that not one cent's worth of Canadian material had been taken into Detroit up to the 6th of March free of duty. The regulations in effect by the Customs Department at Washington, under which the Canadian Government claimed it was justified in entering into a reciprocal arrangement, apparently provided only for the free importation of tools and materials entering into the construction of that part of a bridge immediately over the river or of a tunnel immediately under the river. Yet item 596 of the Canadian tariff was interpreted so liberally by the Department that materials entering into the construction of the three-quarters of a mile tunnel between the Canadian portal and the Canadian water's edge were being admitted free of duty. Your Commitee will point this out to the Government and press for a cancellation of the present arrangement. The entire contract will amount to about $12,000,000, of which it is safe to say fully $3,000,000 will be absolutely on Canadian soil, and when so many of our factories are running short time, and so many of our workmen are out of employment, it is to be regretted that some effort is not made by the Government to direct this business into Canadian channels.

Duty on Brass.

In view of the continued inactivity of the Canada Brass Rolling Mills, in whose interest item No. 349, providing for a duty of 10 per cent. on brass bars, rods, and sheets, was framed, it is recommended that application be made to the Government for the cancellation of the duty on this material.

Tariff Department.

Your Committee regrets that it is not yet able to bring in a final recommendation as to the engagement of a Tariff Officer. The matter has been under consideration on two different occasions, and the applications received have now been narrowed down to two. The parties concerned will be given an opportunity to appear before the Committee at an early date. It is confidently expected that the Committee will be able to bring in its recommendation at the next meeting of the Council.

Technical Education.

The report of the Technical Education Committee referred with satisfaction to the discussion which had taken place in the House of Commons following Mr. Guthrie's resolution favoring the appointment of a Commission of Enquiry. While no decision had been reached, it was known that the proposal was well received, and should there be an opportunity of continuing the debate there was every likelihood that the resolution would carry.

Trade School for Printers.

Members of the Committee had discussed with officials of the University of Toronto a proposal to establish in connection with the University a small printing shop, where all college work could be taken care of. Their idea was that the University should inaugurate in connection with the shop a thorough system of apprenticeship for compositors and pressmen. It could be conducted under the supervision of the Dean of the Faculty of Education, and in that way would serve the double purpose of training a corps of men that could be drawn on to supply the needs of commercial printing shops, and at the same time of testing the practicability of having a curriculum of technical instruction in connection with the Provincial University.

RECEPTION AND MEMBERSHIP.

The report of the Reception and Membership Committee recommended for acceptance the following applications:

TORONTO.

Toronto Picture Frame Co.
White-Allen Co., Ltd.
The Ontario Paper Box Co.
Hughes & Co.
Manton Bros.

VICTORIA, B.C.

J. Piercy & Co.
James Leigh & Sons.
Victoria Chemical Co., Ltd.
The B. Wilson Co., Ltd.

LINDSAY.

The Rider & Kitchener Co., Limited.

MONTREAL.

The Standard Automatic Fire Sprinkler Co., Ltd.
The Missisquoi Marble Co., Ltd.

HAMILTON.

Kerr & Coombes Foundry Co., Ltd.
Hamilton Tool Co., Ltd.
Van Allen Company, Limited.

HAILEYBURY.

Clement A. Foster.

DUNDAS.

Doolittle & Wilcox, Limited.

"INDUSTRIAL CANADA."

A steady improvement in the paper's finances was the feature of the "Industrial Canada" Committee's report, the revenue for March showing an estimated surplus of $161, as against $6.00 in February and only 29c in January. While the surplus was still $100 less than it was for the corresponding month in 1907, it was evident that the paper was quickly recovering from the loss it sustained by there being no advertising solicitor for several months.

Progress was reported regarding the compilation of material for the special Trade Index Number, which was to appear in June instead of May, as first announced. With the steady improvement of the paper, it was thought that the time was opportune to endeavor to extend the paper's paid circulation, and an effort in that direction would be made at once. Plans were announced for brightening the paper in a number of ways, as, for instance, by the regular insertion of cartoons, by enlarging the department known as "Among the Industries," by the publication of photographs each month of business men prominently before the public, and by the insertion of a regular letter from the Branch Secretaries.

The report of the Montreal and Toronto Branches, as presented by Mr. Ewing and Mr. Murray, respectively, were received.

On motion of Mr. Rowley, a unanimous vote of thanks was tendered the Montreal Board of Trade for the use of their room, after which the meeting adjourned.

MONTREAL BRANCH.

The opening of the Quebec Legislature has required the usual vigilance on the part of the Montreal branch to watch all proposed legislation in the interest of our manufacturers.

The system of valuation for taxation purposes in the province has been very indefinite, especially in regard to the question whether machinery should be considered as part of the real estate. This matter was given careful consideration, and a deputation from the Montreal and Quebec branches waited upon the Attorney-General on March 5th and urged that the Municipal Code should be amended in such a way as to remove any ambuguity in the present law, and also requesting that the clause of the Municipal Code be enforced which requires that the by-laws of the different municipalities must not contain any provisions inconsistent with the Municipal Code.

Regarding the petition presented last year to the Premier by the Montreal branch regarding the removal of the grievances existing in connection with garnishment of wages for debt, we have received assurance from the Provincial Government that the matter is now under their immediate consideration.

It has been decided to petition the Dominion Government in connection with other commercial bodies of the City of Montreal that a branch line of the Grand Trunk Pacific Railway to Montreal be constructed either before or simultaneously with the building of the Eastern Division of that railway.

At the last meeting of the Montreal Executive, on March 12th, Dr. Howard T. Barnes, of McGill University, came before the committee regarding the work of the British Science Guild, and a unanimous resolution was passed approving of the aims and work of that Guild, and recommending same to the Executive Council for endorsation.

TORONTO BRANCH.

At the regular monthly meeting of the Executive, consideration was given to the new Elevator Inspection By-law which the City Council is considering. This measure proposes to put all factory elevators under the inspection of a special civic inspector, and to permit only experienced operators over 18 years of age to have charge of elevators in all buildings, one operator being required for each elevator, regardless of the extent to which it is used. Heavy penalties are provided for infractions of the by-law, and fees are charged for licenses and transfers of same. As the measure will entail unnecessary expense and trouble for the manufacturer, and as the Factory Inspector's jurisdiction over elevators would conflict with that of the city inspector, the branch will seek to secure modifications in the by-law to cover its objections.

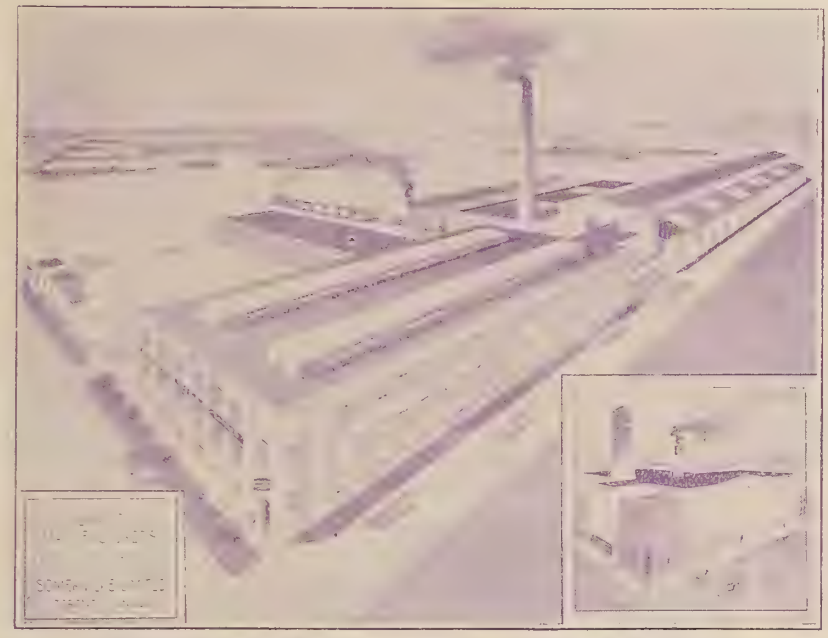
Mr. E. A. DuVernet, K.C., will address the Branch on "The Relations of Labor and Capital in Ontario," following an informal dinner at McConkey's, on Thursday, March 26th. Mr. DuVernet will bring the subject right up to date.

The Executive is co-operating with the Board of Trade and other business organizations in the city in an endeavor to devise a more businesslike system for distributing charitable relief, and thus overcome the overlapping which was so evident in Toronto this winter. It is hoped to have a permanent commission appointed.

Vol. VIII. No. 10 MAY, 1908 $1.00 per year

INDUSTRIAL CANADA

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TORONTO, CANADA

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COIL CHAIN

Our 3/16 B.B.	Chain	has	guaranteed	breaking strain	of over 4500 lbs.
Our 1/4 "	"	"	"		5000 lbs.
Our 5/16 "	"	"	"		10000 lbs.

Strongest and most accurate chain produced

McKinnon Dash & Metal Works Co.

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FIRE INSURANCE

Perfect Protection at Reasonable Rates.

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The New Profit-Sharing Policy

under which Forty per cent of the underwriting Profit is returned to the policy-holders, the EXPENSES being limited to 20% of the premium. This policy has $700,000 assets behind it and only covers the best class of manufacturing plants, warehouses, etc.

The interests of the policy-holders are safeguarded by an advisory committee of PROMINENT MANUFACTURERS. No charge is made for inspection of plants and the fullest possible information and advice as to how to provide the most perfect protection against fire and to obtain the lowest possible rating is furnished free.

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WILL BE GLAD TO FURNISH ESTIMATES AND PLANS FOR

STEEL BRIDGES

For Steam Railways
Electric Railways
Highways, Etc., Etc.

For Factories, Offices, Warehouses, Power Stations, Mill Buildings or any other purposes . . . . .

AND BUILDINGS

ENGINEERS AND BUILDERS OF

STRUCTURAL STEEL WORK

5000 Tons of Steel in Stock

Beams, Angles Channels, Plates, Etc.

Annual Capacity 15,000 Tons

Any size from 1½ inch to 24 inches, and any length up to 70 feet.

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Vogel, H. G., Co ... 806
Walker, Hiram & Sons ... 802
Waterous Engine Works Co., Limited ... 761
Wire & Cable Co., The ... 809

TO the General Public the Dunlop Company is best known through its successes with Solid Rubber and Pneumatic Tires and Rubber Heels. This is a good impression to have abroad because the General Public is an unfailing good customer for these lines. But by the trade the Dunlop Company is to be associated with the rubber business in a wider and more general sense. The Mechanical Rubber Goods Department occupies half of the Dunlop Rubber Works.



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Rubber Heels and Rubber Soling. Shoemakers' Cement.

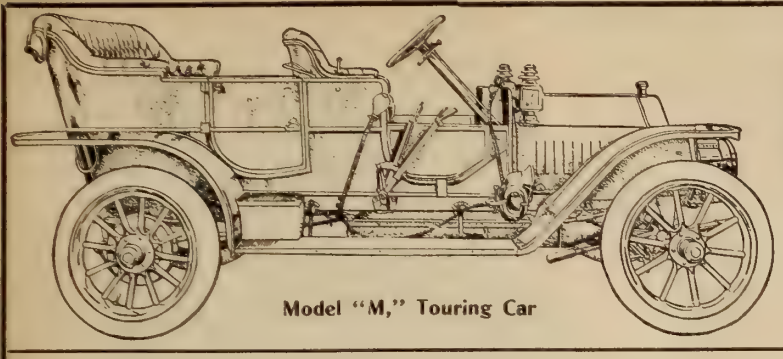
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Model "M," Touring Car

THE

Oldsmobile

FIRST COST VS. UPKEEP

In purchasing an Automobile it is well to remember that the cost of unkeep is just as important as the first cost, if not more so.

This same cost of maintenance has discouraged many who would like to enjoy the pleasures of motoring, but there is always some good and some bad in everything and this applies to the motor car. There are some cars which eat up a sum equal to their first cost to keep them running a season but there are also cars where this expenditure is almost nil.

To this latter class belongs the Oldsmobile, which claim you will say is made by every automobile manufacturer, but is he able to back up his assertion and can he prove this claim to your satisfaction? We can. We claim that an Oldsmobile will not cost as much to keep in repair and adjustment as the average man spends for car fare and to fully convince you of the truth of our statement, we take the risk—not you.

Our proposition is as follows :—For one year from the date of your purchasing an Oldsmobile we will undertake the entire responsibility and expense of keeping that car in adjustment and repair for **ONE DOLLAR A WEEK**. Whether your spark coil needs adjusting or your engine overhauled this amount covers your outlay.

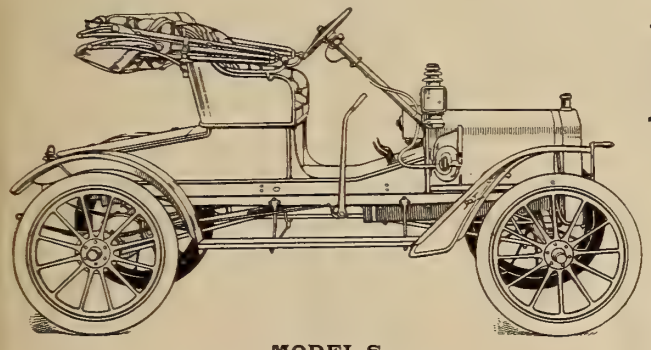
Above is only one of the many arguments in favor of the Oldsmobile. If you would learn more about it visit our salesrooms and we will convince you of its superiority as an investment over any other car in the Canadian market.

Send for our Catalog, and name of nearest agent.

Frederick Sager
Manager

The Oldsmobile Company
OF CANADA Ltd.

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Toronto, Ont.



MODEL S
4 Cyl. 15 H.P.
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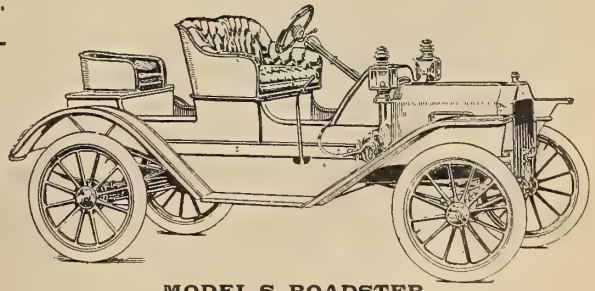
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The idea behind the Ford Cars is a determination to give the public a car of the widest range of usefulness, built in sufficiently large quantities to make the cost as low as possible; a car possessing the maximum of efficiency at a price that will appeal to a business man with a proper sense of value.

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CANADA invented central energy automatic telephony, which in the next ten years will encircle the world, saving vast sums of money both in first cost of installation and in cost of operation and maintenance.

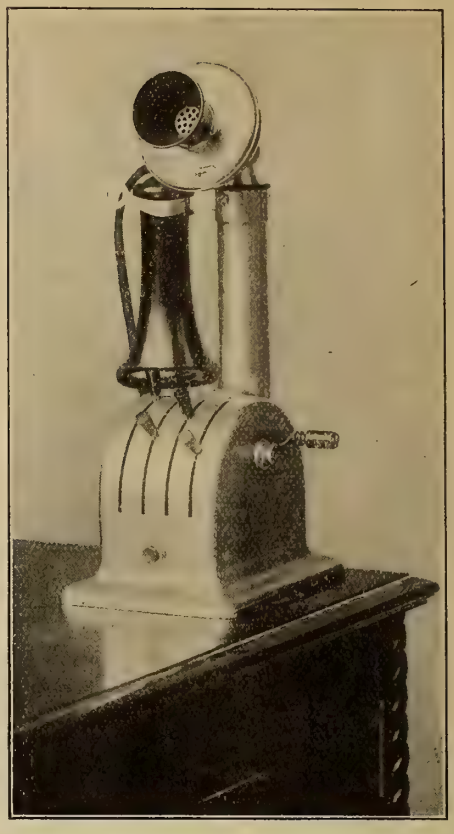
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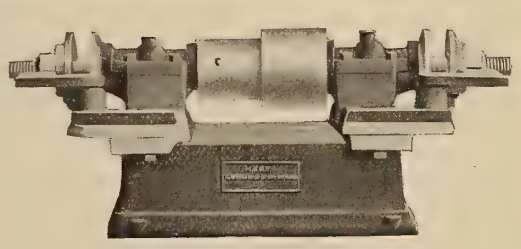
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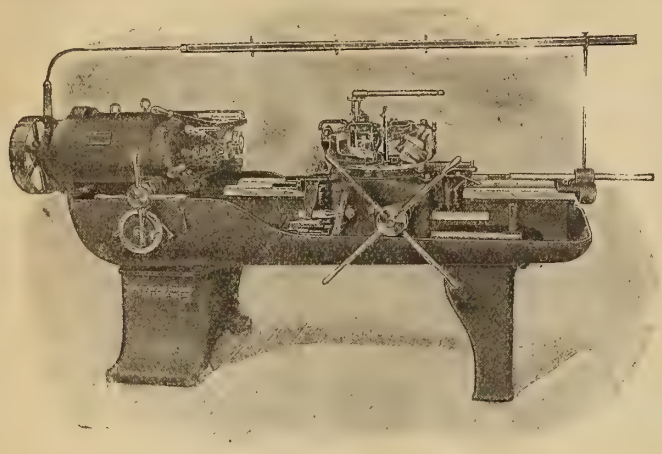
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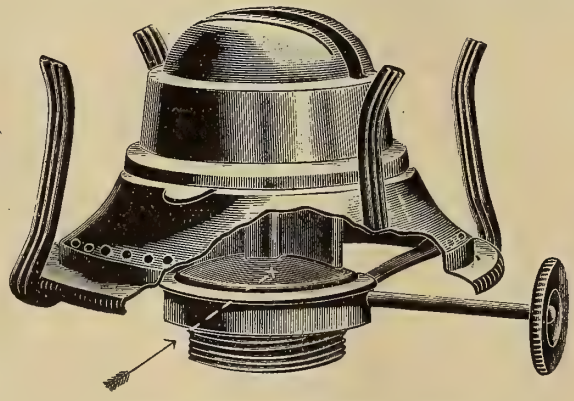
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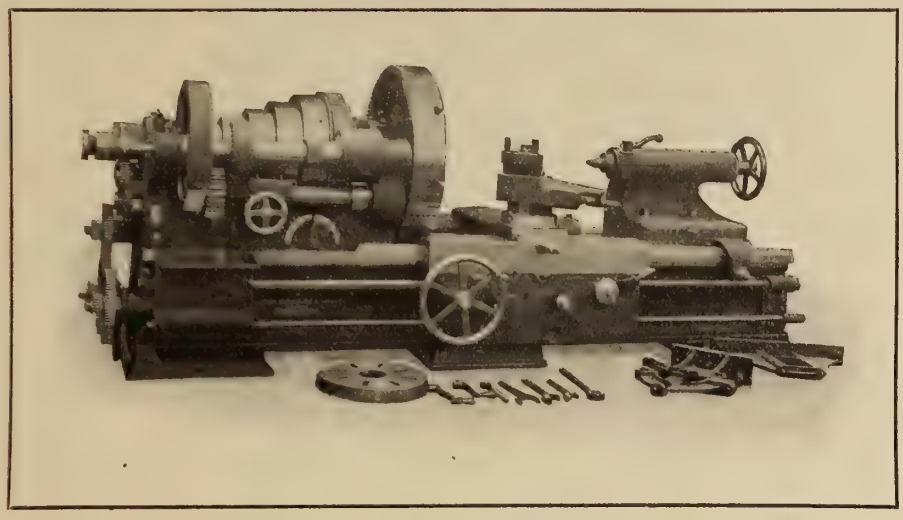
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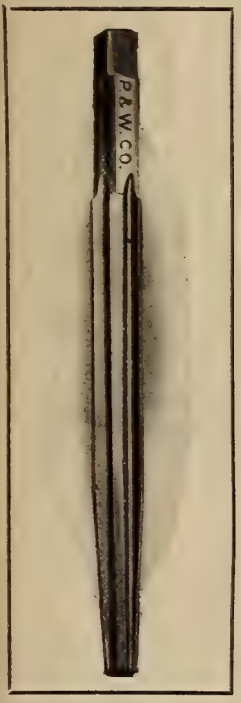
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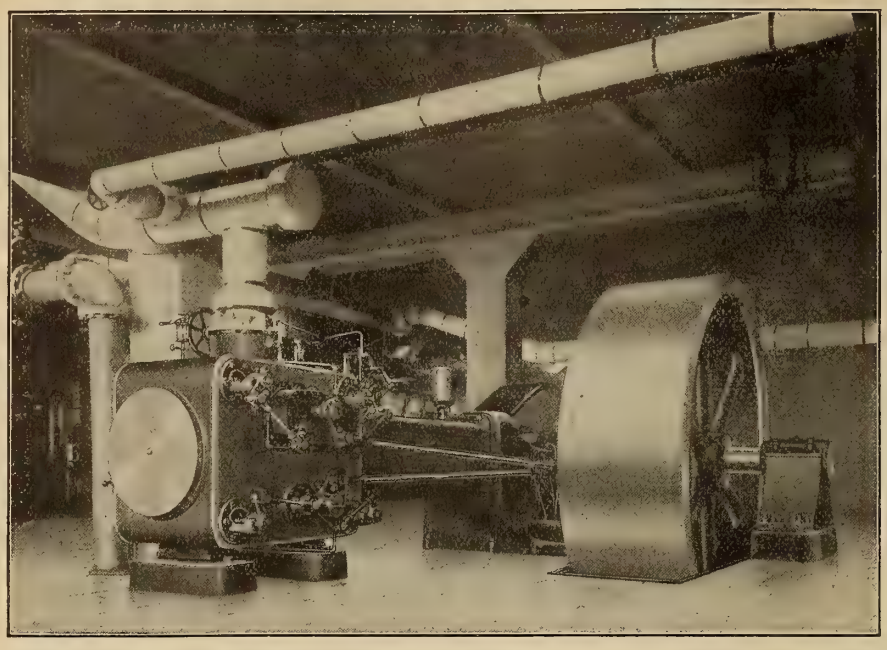




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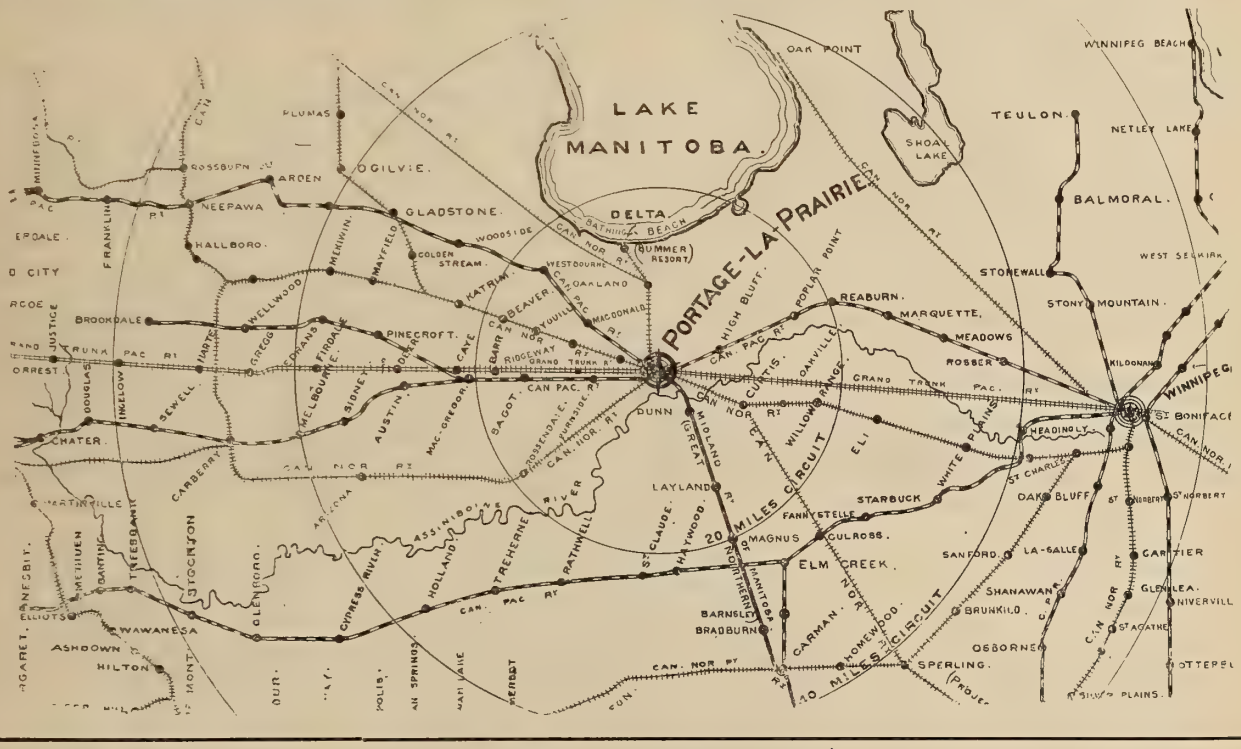
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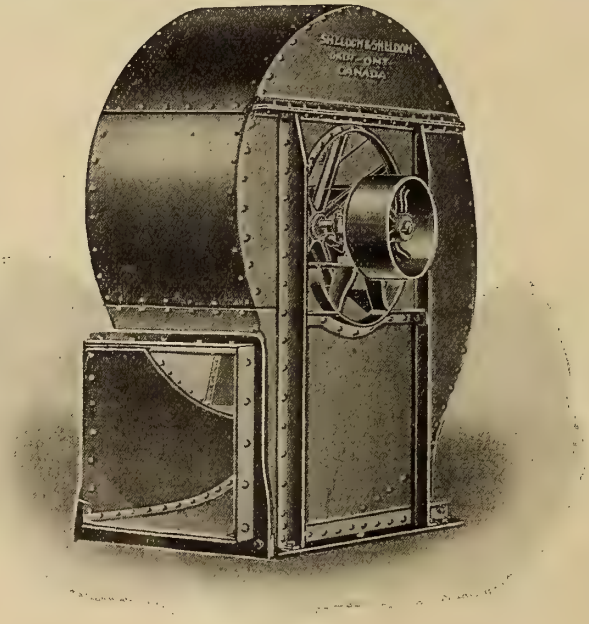
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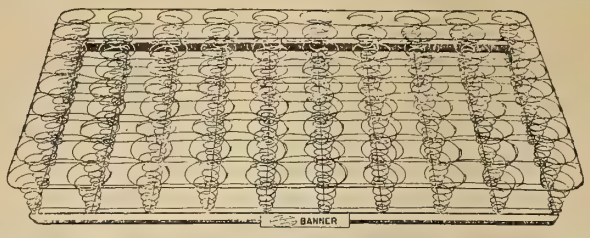
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$8 - A "BANNER" SPRING BED - $8

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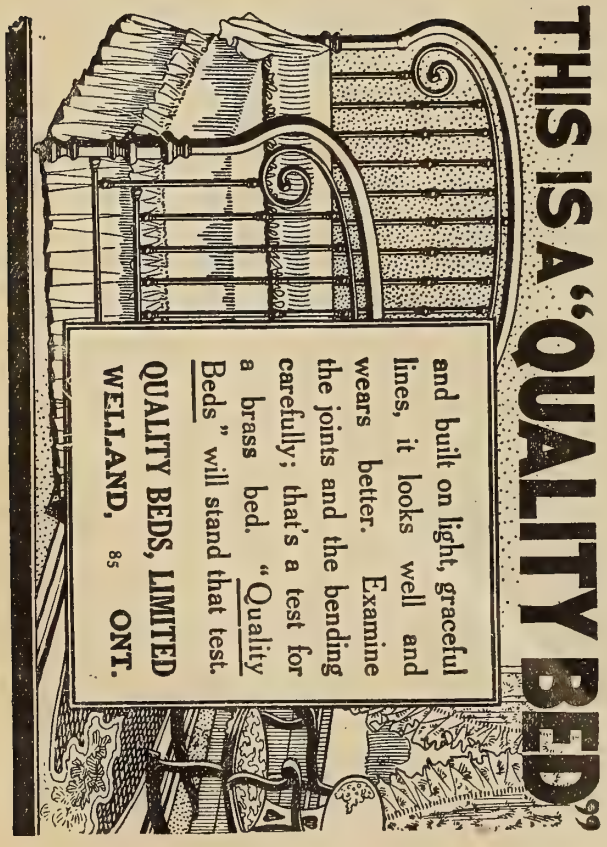
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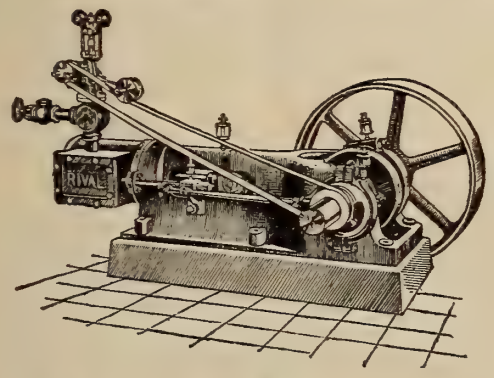
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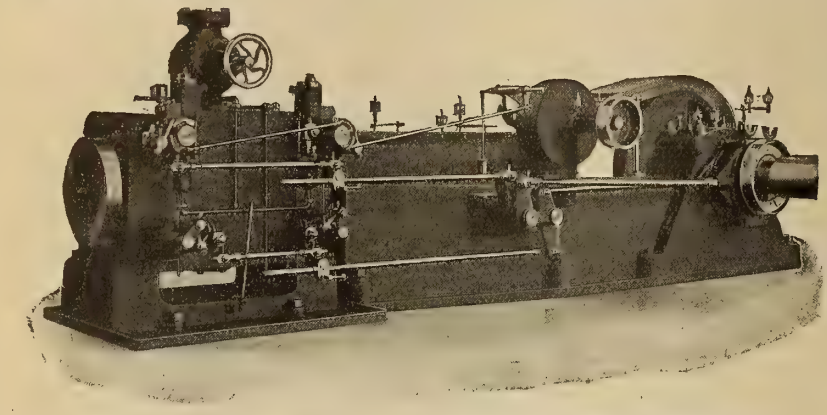
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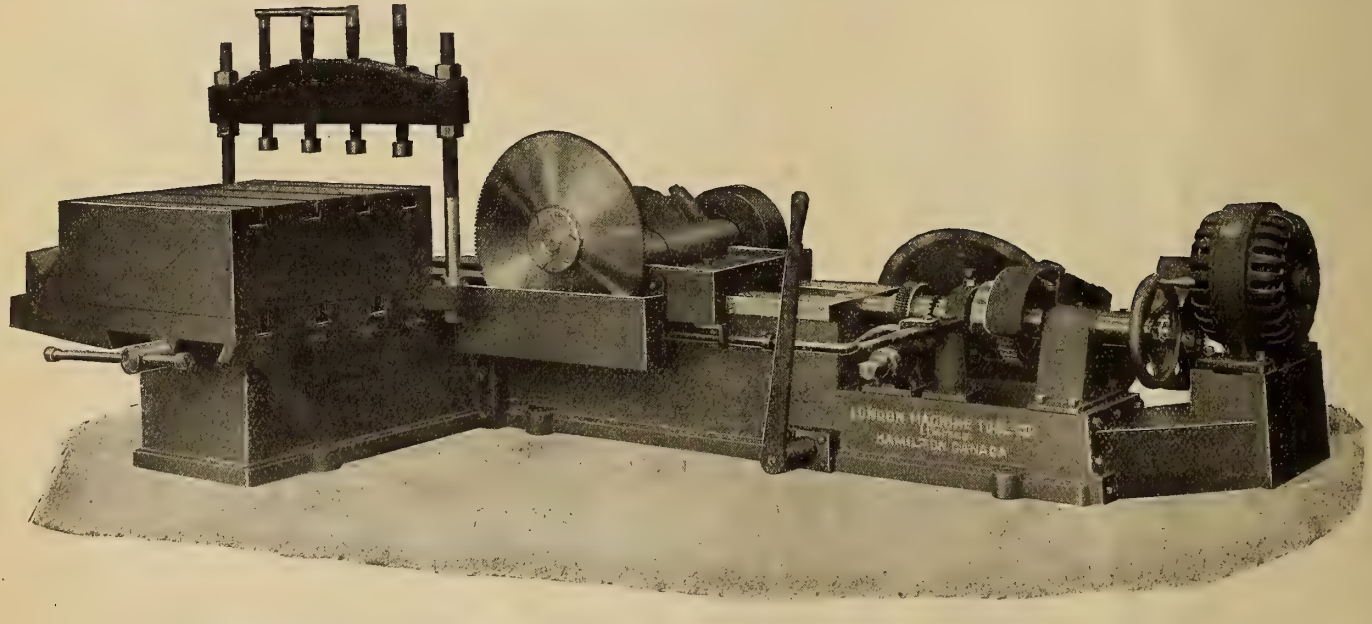
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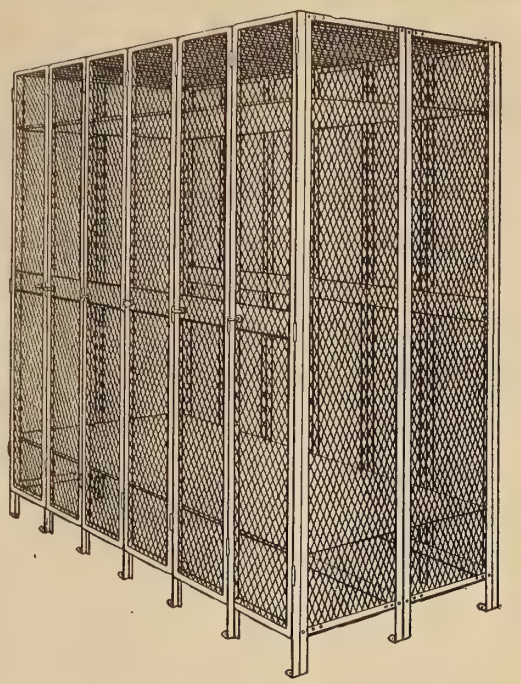
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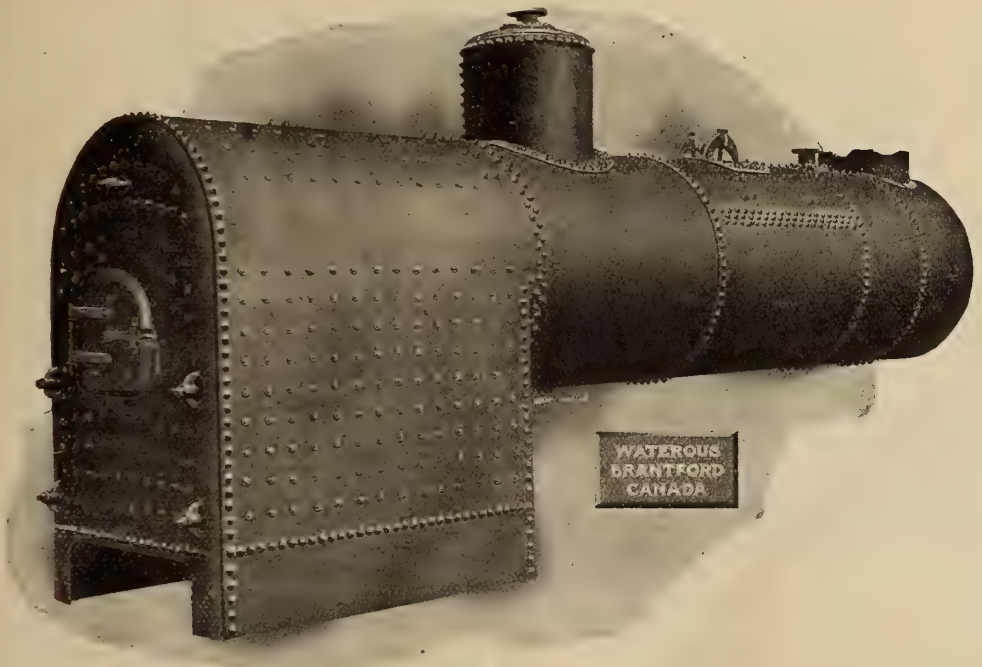
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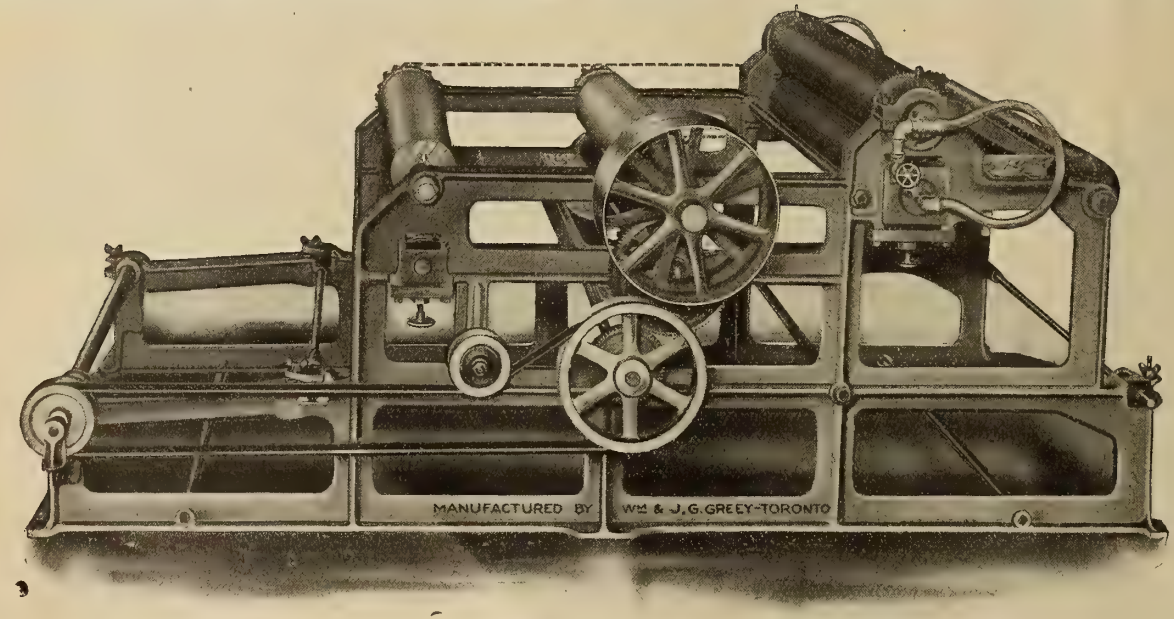
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Vol. VIII. TORONTO, MAY, 1908 No. 10

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THE EDITORIAL VIEW-POINT.

The Outlook.

NOW that the winter, which was a hard one, is over, business people are asking what the spring and summer have in store for them. The trade depression of the winter came on with a suddenness unknown in former times of stress. As one manufacturer put it, "Business dropped from prosperity into stagnation over night." Will the return of prosperity come with equal suddenness? That is something everyone would like to know, but no one can tell. Everything points to a return of good times and increased business activity in the near future, but caution has got such a firm hold on the business community that there is no one brave enough to discount the prospects of the future by launching out at the present time. The orders which travellers are booking at present are mostly of the hand-to-mouth kind, and very few are getting large placing orders for full delivery. This holding back of orders is a great hardship to manufacturers, who are unable to estimate what the requirements of the trade will be when the time comes when demands for immediate shipment will be made upon them by their customers who are afraid to order now. It also means that many merchants throughout the country will be disappointed next fall when they will be unable to obtain the goods their trade demands. That there will be a demand for all kinds of merchandise in the near future no one can doubt who is at all familiar with present conditions and prospects. Since the beginning of the year upwards of $100,000,000 has been secured in Europe for expenditure in Canada. Most of this is going into railway construction and within a couple of months it will begin to be distributed in wages to workingmen and for supplies. In the West seeding has commenced and the crops will be in a full month earlier than they were last year, which promises an early and abundant harvest. An early harvest means one that is saved in good order and in time to be marketed under the most favorable conditions. In addition advices from the West tell us that the acreage under crop this year will be very much in excess of that of last year. Immigration, too, is coming in in a steady stream, and of a better class, so far, than in former years. Seldom indeed have the prospects for a prosperous year been brighter than they are at present, and the holding back of orders in the face of this cannot be explained in any other way than that caution has grown into cowardice. The few who have the nerve and the foresight to make preparations now to meet the demands which will be made upon them within a comparatively short time will reap a rich harvest.

Other People's Money.

SOME people take the view that the large loans which we have been negotiating in foreign countries are not a good thing for Canada. A prominent business man, discussing this phase of the question the other day, pointed out that, with the balance of trade against us, these loans became a mortgage upon our future, and that the interest charges would eventually become a heavy drain upon our resources. Under certain conditions this reasoning is sound enough; but the money that is coming into Canada at the present time is for investment, and does not come under the head of an ordinary loan. Money that is put to work in developing the country earns its own interest without taxing any enterprise that existed before its coming. The more money that we can induce to come here for judicious investment, the better for all of us. That a portion of the profits made on the development of our latent resources has to be paid out in interest is no hardship, since without the capital there would have been no profits at all. Some people have a habit of looking on borrowed money as an obligation that has to be repaid with interest. When money is borrowed on the credit of some established enterprise, and invested in some other undertaking that turns out a failure, it becomes a burdensome charge; but it is an altogether different proposition

when it goes into an enterprise on the successful development of which it has to depend for its return with profit. The millions that are coming into Canada are for the development of the country, and all of us will be made richer by their employment here.

The Grand Trunk Board.

AT the meeting of the Grand Trunk in London recently, someone proposed that the Grand Trunk Board should be moved to Canada. Sir Rivers-Wilson, the chairman, vehemently rejected the idea. Nothing could be more insane, he said, than for the English shareholders to lose control of the concern. The half-yearly meeting would consist of paid officials and no one else. It would be a mere bogus Board, and the change would be deadly to the credit of the company. Most Canadians think it is insane on the part of the Grand Trunk shareholders to keep the Board in London. However, that is a matter for themselves to decide. So long as they are satisfied to play a losing game, it is no one's business but their own. The C.P.R. shareholders, however, prefer a Canadian Board of capable Canadians, who earn dividends for them. Possibly the Grand Trunk shareholders consider that the fun they get out of the semi-annual meeting in London more than compensates them for the loss they sustain through not turning the Board over to Canadians, who would run it on a dividend-earning basis.

The Advertising Grafter.

THERE is possibly no calling that breeds so many schemes as the advertising business. Every manufacturer has had a host of schemes brought to his attention whereby he was to be immediately made a millionaire. It is safe to say that ninety-nine per cent. of these are utterly worthless. In the United States this class of grafters got to be such a nuisance that the manufacturers who were larger advertisers got together and formed an association for their mutual protection. This association recognized as legitimate three mediums, namely: regular publications, such as newspapers, magazines, and trade journals; street cars; and bill-boards. With this pronouncement came the death-knell of many time-honored schemes, and the big advertisers of the United States ceased to be marks for the grafter. In Canada, unfortunately, the grafter still finds profit in his schemes, and he brings a new one forth on every conceivable occasion. No event of national importance is allowed to escape these industrious gentlemen, and it is not surprising to learn that the celebration of the Tercentenary of the Foundation of Quebec is to be commemorated by the publication of an album, in which a limited number of only the important firms will be permitted to purchase advertising space. The circular which has been going to leading manufacturers and business men all over Canada soliciting advertisements, promises that the work "shall be above all other publications the most artistic and literary which have been published up to the present day." Dr. R. Villecourte, Laureate of the Academy of Medicine, of Paris, "one of the most learned writers that we possess in Canada," has the publication under his direction, and J. O. Leger, with offices in the New York Life Building, Montreal, signs the circulars as general agent. The work is to "contain a synopsis of the history of Canada from Jacques Cartier down to our day," together with innumerable pictures and unpublished documents. This is certainly a big programme to get into one book, but the promotors were not satisfied with making their promises unbacked by a liberal supply of patrons for the work. The list of patrons would occupy too much space for publication here. It is headed with Earl Grey, Governor-General of Canada, Sir L. A. Jette, Lieutenant-Governor of the Province of Quebec, and the Rt. Hon. Sir Wilfrid Laurier. Then follows in order a list of the Federal Cabinet Ministers, the Ministers of the Quebec Legislature, a contingent of Senators from Quebec, the mayors of Quebec, Montreal, Ottawa, and Toronto, a bunch of M.P.'s and prominent citizens of Quebec, and winds up with the Roman Catholic Archbishops of Montreal and Quebec, and the Anglican Lord Bishop of Montreal. That there are some errors in the list, such as describing the Speaker of the Senate as the "President of the Senate," does not seem to shake the general agent's confidence in the accuracy of the history he promises. But there is a still more striking inaccuracy in the list, which will shake the confidence of the public in the whole scheme. This inaccuracy consists in the names themselves. Earl Grey says that the use of his name was unauthorized; the Lieutenant-Governor of Quebec says he never consented to be a patron; Sir Wilfrid Laurier says he has no connection with it; the Archbishop of Montreal says he is not a patron; the Anglican Lord Bishop of Montreal never heard of the work; the Minister of Marine & Fisheries says that he cannot discover that he ever gave his consent; the Minister of the Interior says he has not consented to be a patron; the Postmaster General never authorized the use of his name, likewise the Minister of Railways and Canals. The Archbishop of Quebec has been out of the country for five months, and the Consul-General of France left Canada for good a year ago, and his successor has not yet arrived. This wholesale use of the most prominent names in Canada seems a daring stroke for even a man with an advertising scheme, and it called for some explanation. Mr. Leger has given it. He says he had written each of the personages mentioned in the prospectus. "I informed them that if they had any objections to serving as patrons they might write me to that effect. If they had no objections I would use their names without further notice. As they did not inform me that they objected to the use of their names, I have gone ahead and put their names down as patrons." This left-handed method of securing patrons ought to be sufficient warning to manufacturers and business men generally, who have been invited to purchase advertising space in the work. The promise that it will have a circulation of 100,000 copies is not guaranteed by anything more substantial than the circular itself, which contains the names of the prominent people who have thought it prudent to repudiate such use being made of them. Manufacturers who have money to spend on advertising will do well to spend it on the recognized mediums. Programs, souvenir publications and a host of other schemes take thousands of dollars annually out of the pockets of manufacturers and merchants that might with equal profit be thrown into the street.

Labor Union Labels.

CLASS legislation is abhorrent to a free people, and as Canadians claim to be the freest people on earth, Parliament should hesitate before it gives its sanction to any act that places any one class in the community on a higher plane legally than any other. Mr. Ralph Smith, M.P., has introduced a bill into the House of Commons of Canada, the object of which is to place the products of approximately one-eighth of the working people of Canada on a higher plane than that of the other seven-eighths who are equally as skilful. The bill is entitled "An Act Respecting Labor Union Labels," which aims to give a legal recognition to Trade Union labels, and to vest the absolute control of the same in legally irresponsible associations. If this Act once passed into law, the labor unions would have a weapon which would enable them to coerce and even ruin employers. The uses

to which a legalized Union label could and would be put, are so far-reaching and dangerous that Parliament should hesitate long before giving its sanction to any such legislation as that proposed by Mr. Smith. He very plausibly explains that it is a harmless little thing, that the manufacturer employing union labor is at liberty to accept or reject it when offered its use by his employees. It is merely a permissive act, there is nothing compulsory about it. If all this be true, why then pass the act at all? Surely it is only wasting the time of Parliament to occupy it with matters of such indifference. No one is going to be led astray by smooth talk of this kind. The purpose of the Union label is to place a mark upon the products of unionism, to the disadvantage of all others. It is not a guarantee of quality, of workmanship, or of anything in which the purchaser is interested. Its sole purpose is to advertise the fact that unionism has got control of the factory from which the product that bears it is turned out. With this distinguishing mark upon the products of unionism, the way is made easy to carry on a boycott against the products of independent labor. Why should Parliament take sides in the dispute between unionism and independent workingmen? By passing this act it would be ranging itself on the side of unionism and aiding it to drive independent labor into a corner, where it would be crushed. Without this label the products of the open shop and the union shop are placed on the counters of the merchant side by side, and quality makes the sale. While the label does not guarantee quality, still it can be used as a means of forcing the merchant to refuse to carry a line of products that does not have it, by threatening to boycott his store. That this would be done, we cannot doubt, in the light of what has already been attempted. We have before us a circular issued by the Label Committee of the Winnipeg Typographical Union No. 191, and addressed to advertisers generally. The circular contains a resolution passed by the Canadian Society of Equity, said to represent 5,000 farmers of Western Canada, which, after naming several publications, concludes "all of which are published in Winnipeg, Manitoba, do not carry the label of the International Typographical Union, and are the products of non-union labor. Therefore, we, as loyal union farmers, and desiring to co-operate with organized labor, do hereby resolve not to patronize any of the above non-union publishing houses." This circular has been mailed broadcast to advertisers, with a view of injuring the business of the publications it names. And this is the kind of thing Mr. Smith asks Parliament to aid by passing an act to legalize the label that makes it possible.

HARD ON THE WOOLLENS.



MISS CANADA :—Ch, dear me, Mr. Fielding, this will never do. Look at the way it has shrunk.

What the Act Really Means.

MR. SMITH'S bill can in no sense be said to be in the general interest of Canada, and that is the interest in which Parliament is supposed to legislate. On the contrary, it is an act in the interests of a comparatively small proportion of the people of Canada, and against the interests of the vast majority. It is dangerous to our industries, to our foreign trade, and to the thousands of skilled workingmen who are fighting to maintain their independence of action. To pass such an act would be an offense against the liberty of the independent workingmen, of the merchants, of the manufacturers and of the public generally. It is scarcely conceivable that Parliament could be guilty of such a great blunder as to place the seal of its approval upon the instrument, innocent as it appears, which unionism has invented for the coercion and oppression of all who refuse to bend before it.

Woollen Manufacturers and the Tariff.

THE preferential tariff was a hard blow to the woollen manufacturers of this country. Some mills were forced to close down as a result of it, and others have struggled along under the most unfavorable and unfair conditions. In addition to the hardship which our manufacturers have to bear by reason of the preferential tariff, they have also to face the unfair competition of the British exporters, who have been "dumping" woollen goods into Canada at much lower prices than are obtained in the British market. The average customs appraiser is not competent to pass judgment on the qualities or value of woollen goods, and the "dumping" goes on unchecked. This state of affairs has been borne by the woollen manufacturers with as much patience as possible; but the time has now arrived when the Government must give them some relief, or see one of our most important industries wiped out. A deputation, representing the woollen manufacturers of Canada, waited upon the Government last month, and laid the whole case before the Ministers. They asked for a reasonable increase in the present duties, which would ensure a fair amount of protection. They also asked that the Government add to the staff of the customs department men familiar with both woollens and cottons, and competent to detect under-valuation in these lines, and stop the "dumping" that is now going on. The request is a reasonable one, and if the Government realizes what a vital matter it is for this branch of industry, they will surely see the justice of the demand and accede to it.

Cotton Duties and the Farmer.

ONE of the favorite complaints of the farmers of this country is that they, as the chief consumers, pay out of their pockets the whole duty levied on cotton goods. That this is one of the wildest statements made by opponents of protection, is well known to those familiar with the trade. While the duty is 25% nominally, the actual protection to Canadian cotton is not more than 10%, which is all the Canadian consumer is out of pocket by reason of the duty. To illustrate this we have before us an actual transaction which makes the situation clear. The Canadian Cotton Company was asked to quote a price on Turkey red cotton cloth to compete with an English line which is being imported. The English goods are being laid down, paying a duty of 25%, at 5.60c. a yard, and to meet this the Canadian company quoted a price at 5¼c. The English price is a cut one made by the largest manufacturer of Turkey reds in the world, in an effort to secure the Canadian market with a view to future profits. The Canadian price is also a cut one to meet the English, plus a protection of about 16%. At regular prices, that is, if the English firm were not cutting prices, the price at which the Canadians would have to sell would show a protection of only 10%. The consumer, therefore, instead of paying the whole duty, as he claims, pays only a small fraction of it, and this is made up to him many times over by reason of the larger home market which the factories ensure him.

Touching the Farmer.

THE farmer is himself the beneficiary of the protective tariff both directly and indirectly. A striking instance of how closely his interests are bound up in those of the manufacturer was brought to the notice of the Government recently, through a statement laid before them by the pickle manufacturers. Like the woollen men the pickle manufacturers of Canada have been seriously handicapped by the workings of the preferential tariff. There are some twenty pickle factories in Canada, in which upwards of half a million dollars is invested. These factories furnish a ready and profitable market for the vegetables grown in this country, and if they were forced out of business through the unfair competition which they have to meet from the large importations of cheap British pickles, the farmers would be the ones to suffer most severely. The Canadian manufacturer of pickles has to pay a high price for his glass, labels, corks, spices, and cases, all of which are protected by the tariff. In England all of these come in free. Besides, in Canada vinegar is an excise article, paying an excise duty of 4c. per proof gallon, and in addition each factory has to pay a license fee and officer's salary amounting to $650.00 per annum. In England, vinegar is not an excise article, and is therefore free of the tax. Labor in England is also cheaper, and the result is that the Canadian pickle manufacturer is up against a terrible handicap. England gets her vegetables from Holland, Germany, and France, and her glass from Germany. The result is that what are known in this country as English pickles are really Dutch, German and French vegetables, packed in German glass and shipped out to this country in Norwegian-made cases. The only thing British about them is the vinegar, and that is allowed to escape the customs duty of 10c. per proof gallon, because it is allowed in under the classification of pickles. It was not the intention of the framers of the preferential tariff to extend its benefits to the Dutch, German and French farmers, to the detriment of our own farmers, but that is the way it has worked out, for it is the products of these countries that are really enjoying it under the name of British pickles. Moreover, vinegar is the only excise article that is allowed to come in under the preferential tariff, and then only when it comes in as a part of a consignment of pickles. It will be readily seen from the foregoing that the manufacture of pickles in Canada under existing conditions must be unprofitable, and cannot last unless the Government puts on a duty large enough to offset some of the disadvantages it is under at present. A petition signed by more than twelve hundred farmers has been sent to the Government asking that the duty on British pickles be raised to 40%, and that the duty on those from other countries be made correspondingly higher. If this is not done they realize that they will lose the market for one of their most profitable crops. It is gratifying to find the farmers joining with the manufacturers to ask for protection. It shows that they are beginning to realize that the preservation of Canada for Canadians is the policy that benefits the whole community. We understand that the Government has been asked to act in this matter forthwith, and that if action is not taken at once, some of the largest factories in the country intend calling the farmers together and explaining that they cannot carry out their contracts, and advising them to find some other use for their land. They feel that it is only fair to warn the farmers before seeding time not to plant vegetables for which there will be no market, if the Government fails to come to the relief of the pickle manufacturers. In addition to the farmers, the glass and vinegar manufacturers, the distillers, the lithographers, printers, cork cutters and box manufacturers will all be losers, for everything about Canadian pickles is Canadian except the spices, which have to be imported, and pay a duty of 12½%.

At the Expense of Canada.

PRESIDENT Roosevelt sent a short message to Congress recently which contained this significant paragraph: "I am of the opinion, however, that one change in the tariff could, with advantage, be made forthwith. Our forests need every protection, and one method of protecting them would be to put upon the free list wood-pulp, with a corresponding reduction upon paper made from wood-pulp, when they come from any country that does not put any export duty upon them." This is a pretty plain indication that the President's idea of preserving the forests of the United States is to do it at the expense of Canada. He also recognizes that if we are alive to our own interests we will immediately put an export duty on wood-pulp and pulp-wood, and he provides against this contingency, or perhaps he thinks to scare us out of protecting ourselves. It is to be hoped that we will have the common sense to take measures to prevent our forests being sacrificed for the protection of our neighbors. All we have to do is to close the door against our raw material going out, and before long we will be supplying our neighbors with paper. Let us not lose sight of the fact that it will not be long till we have the whole press of the United States campaigning for us. They must have paper and if we do not give them the raw material to make it out of they will have to come to us for the finished product. We have it all in our own hands.

The Responsibility of Directors.

HOW many men have joined the boards of banks and other financial institutions with a full realization of the responsibilities they assume? It is safe to say that very few of those whose names appear on boards of directors gave the serious consideration they should have given to the responsibilities of the position. The honor, and in some cases, possibly, the fees, were the only consideration taken into account. Acting as a director was looked upon as a mere formality. In the case of a bank everything was left

to the manager. He submitted reports and made suggestions, and everything he proposed was carried and that was all there was to it. It was something to be proud of to have one's name on the board of directors of a prominent bank, and the honor was eagerly sought by men of prominence and ability. In future, however, the serious side of a directorship is not likely to be lost sight of. The Court of Appeal of Nova Scotia has just handed down a decision in connection with the failure of the Yarmouth Bank that is calculated to set the directors of banks everywhere in Canada thinking. The judgment holds that, in addition to the double liability on their stock, the directors of a wrecked bank are also responsible to the shareholders for losses which are directly traceable to negligence in the administration of the bank's affairs. The judgment points out further that, while under ordinary circumstances, a director is not obliged to examine the books, when anything occurs to arouse his suspicions it becomes his duty to investigate and take prompt action in the matter. It is no defence to plead that everything has been left to the manager, and that his word was taken as to the condition of the bank's affairs. This decision will bring home to the directors of the banks, and of other institutions in which the public have invested money, that a directorship carries with it duties of a serious and responsible character, and that neglect to perform these duties renders the directors liable. Men of substance will not be so eager to go on boards in the future, and having done so, they will keep a close eye on the affairs of the institution which they are supposed to direct.

A THANKFUL HEART.



UNCLE SAM:—I hate to lose my children, but I'm glad they're going to a country with such a low tariff wall that I can step over and furnish 'em with all the goods they need.

Unjust Freight Rates.

COLONEL J. S. PARK, of the Allan Line, according to a London cable, has been defending what is known amongst shipping men as the deferred rebate system adopted by the Canadian lines. He admitted that there were lower rates for goods sent to the interior than to Montreal. These rates, he explained, were the result of excessive competition. The reason for the rates is of little interest to the Canadian manufacturer. What interests him is the fact that his British rival can ship goods from London to the West for less money than he can have his goods shipped to the same points from Montreal to Toronto. Taking the average the year round the British manufacturer has decided advantages in freight over the Canadian manufacturer. He can ship his goods into the Maritime Provinces cheaper than the manufacturers of Quebec, Ontario or Manitoba, and he can ship into these provinces cheaper than the Maritime Province manufacturer can. Taking Winnipeg as the centre of Canada, the British manufacturer can get, in summer, sometimes, a through rate of freight from Liverpool, London or Glasgow to Winnipeg cheaper than the Province of Quebec or Ontario manufacturer can; and in British Columbia the British manufacturer, using tramp steamers, gets a freight rate that is far cheaper than any Canadian manufacturer can obtain. Shipping men contend that these rates are necessary to secure traffic for their lines, but it is hard to make the Canadian shipper understand the justice of a freight rate which carries goods from Liverpool to Winnipeg cheaper than from Montreal to Winnipeg. It is unnecessary to point out how this hampers the Canadian manufacturer. His protection under the preferential tariff is so small that it requires only a very slight difference in freight rates to leave him without any at all. The Railway Commission should see to it that goods delivered to the railways from steamships are not carried to the West for less than goods delivered to them from Eastern factories. With rates for the rail haul the same, the Canadian would have the advantage of the ocean rate, which would make it worth while to have his factory in Canada. As it is to-day, so far as freight charges are concerned, he might as well, and in many instances he might better have his factory located in England. The shipping men say the railway and express companies are to blame for quoting rates without consulting them. If this is so, surely the Railway Commission has the power to stop it, by ordering that Canadian goods get the same rate over the Canadian lines as are granted to merchandise from abroad. It is an injustice to our manufacturers to allow this discrimination to continue.

South African Manufacturers.

IN South Africa they have a manufacturers' association called the Natal Manufacturers' Association, the report of the second annual of which, reprinted from the *Natal Mercury*, of February 12th, is before us. The report makes interesting reading, and indicates that the same problems confront the manufacturers of that far-off sister colony as confront ourselves. The most of the report deals with the custom tariff of 1906—the first attempt at a protective tariff made by

the colony. It is declared to have proven a great benefit in as much as it has placed the industries on a more solid footing. It is pointed out that while the two years' experience they have had of protection has been useful in showing what can be accomplished under favorable circumstances, there is still much to be desired. One of the stock arguments of the Free Traders, the report says, is that the manufacturers are never satisfied but are always asking for more, which reminds us of arguments we have heard in Canada. It is pointed out that the only manufacturers who are complaining are those who ask for 25% protection, and got only 10%, and their continued demands are not for more, but for the full amount of what they originally asked. One of the most immediate benefits of the tariff was the relief it brought during the depression following the war. It enabled the industries to expend over three million pounds sterling per annum in wages and local raw material, and to afford employment for 7,000 Europeans, who would otherwise have been destitute. The Chairman, in moving the adoption of the report, said that it would be readily admitted that the backbone of any country was its industries, and the seconder of the motion added, that it took the public a long time to learn a lesson thoroughly, but he thought that they were learning the lesson that they had only themselves to thank for the depression and its evils. The carrying trade was an inelastic quantity, and they could not expect to go on importing their supplies without exhausting the capital they had made by the development of the mines and by the war. If they had conserved that capital earlier—if a protection tariff had been imposed when times were good in 1903—he questioned whether the depression would ever have been experienced. The pinch of poverty had driven the lesson home.

The British Preference.

A CURIOUS idea, judging by some recent English speeches and press comments, is taking hold of the British public with regard to preferential trade with the colonies. The idea is that the colonies are only waiting for Britain to give them a tariff preference before throwing down the tariff wall which bars out British goods. How this idea ever came into being is as impossible to say as it is unlikely ever to be carried out. The policy of Canada, backed by the vast majority of the people of this country, is to build up our own manufacturing industries, and no country, not even Great Britain, can hope to cater to this market on even terms with our own people. On goods which we cannot make, and are therefore forced to purchase from outsiders, British manufacturers already have a preference in this market of 33 1-3%, and if they cannot control it with that advantage, the fault is with themselves, and is of such a serious nature that no legislation can cure it. We have been frequently reminded by speakers in England that the British preference has proved a failure. Our answer to that is, if the preference has not been a success the fault is not ours. Our Government certainly cannot go any further in forcing the people to purchase British goods, which they evidently do not want. Canada has already done all that can fairly be expected from her for the British manufacturer, and if a preference for Canadian products in the British market depends upon further concessions from Canada, it is to be feared that there will never be a preference. The preference already given has been a serious blow to some lines of Canadian manufactures, as pointed out in a preceding article, and the chances are all in favor of its being wiped out so far as these lines are concerned. Preference, like charity, should begin at home.

The French Treaty Revised.

WHEN the House of Commons went into committee on the bill to amend the Ocean Steamship Subsidies Act, so as to provide for a total subsidy of $200,000 per annum to a line of steamers making 36 trips yearly between Canada and France, Mr. Henderson raised the question whether French goods reaching Canada via Great Britain would be admitted at the minimum tariff the same as if imported direct from a French port. The Finance Minister replied that it had been thought wise to have it so arranged. It will be remembered in this connection, that, when the French Treaty was before the House, a great deal of stress was laid on the fact that the provisions of the treaty made it necessary for goods to be imported direct from a French port in order to enjoy its benefits. This was held up as one of the best features of the Treaty, as it meant the building up of a direct trade with France that would greatly benefit Canada. It is, to say the least, somewhat surprising to find the Government making a concession to France so soon, on what they recently proclaimed as one of the best features of the Treaty. France is making no such concession to Canada, and will impose a surtax on indirect importations from this country. It does not seem a very wise policy to pay $200,000 per annum to a steamship line to establish a direct service between Canada and France, and at the same time remove the inducement which would have made it worth while for the French shipper to patronize the line. The Finance Minister says the Government has thought it wise to have it so arranged; but how they argued themselves into such a belief is beyond the reasoning powers of the rest of us.

Uniform Bill of Lading.

MR. JUSTICE MABEE, Chairman of the Railway Commission, has promised early consideration of the question of a uniform bill of lading. The Canadian Manufacturers' Association have been agitating for this very necessary reform, and are now asking the Shippers' Association and the Boards of Trade throughout Canada to join with them. It is important that all interests affected should be represented before the Railway Commission when it takes this matter up, in order that a decision which will be final and satisfactory to all may be arrived at. Whatever form of contract is adopted now is likely to become permanent, and it is important to have it satisfactory to everyone concerned. It is to be hoped, therefore, that the Shippers' Association and the Boards of Trade will make their views known. By endorsing the action of the Canadian Manufacturers' Association and giving support to the two forms of contract, one for order shipments and the other for straight shipments which have been submitted for their consideration, they will greatly strengthen the case and serve their own best interests.

Union Rules Are Not Law.

MR. JUSTICE LEBEUF gave an important decision in the Montreal Circuit Court recently. The case arose out of the unloading of the Dominion liner, Englishman. Two gangs of 16 men each, under two foremen, were engaged at two different hatches, and were changed to suit the working of the ship. The men took action, claiming $28.00 each on the ground that the rules of the union were that when a gang started on a hatch they should finish it, whether or not the full complement of sixteen was needed. The secretary stated that this was the custom of the port. The judge overruled the custom and dismissed the action. He also held that the men were engaged by the hour and could be dismissed or could leave without notice. The union will, no doubt, have a grievance because the court refused to recognize its rules as law.

D. M. COUGHLIN.

PROSPECTS OF EMPLOYMENT FOR LABOR.

By James G. Merrick

Secretary of the Employers Association, Toronto

The general curtailment in manufacturing which followed the refusal of the banks to support industries as they had been doing threw many men out of employment during the winter. These men are becoming absorbed now that navigation and farm work has been resumed. While a renewal of normal conditions must come gradually, conditions are now showing a marked improvement.

THE decline in industrial activity which made its first appearance last October has caused a very great deal of distress, not only to industrial workers, but in nearly every other occupation which has been sympathetically affected. In order to estimate the chances for a renewal of activity and of the employment of labor, both skilled and general, it is necessary to ascertain the causes which lie at the root of the present so-called depression, and to see what prospects there are for their early removal.

It has been generally conceded that our halt in industrial progress has been caused largely as a reflex from the money stringency in the United States. Their difficulty was almost entirely produced by a lack of confidence of the general mass of the people in their banking institutions, which resulted in a very large amount of the currency of the country being removed from deposit and retained in the homes of individuals.

What Induced the Trouble.

In Canada our depression has not been due to the causes in the United States, but has followed from their results. For several years the growing needs of the country required many more hands than were available. Not only was skilled help urgently needed to man our factories, but there was a constant cry from our farmers for labor to cope with and extend the area of cultivation. For several years there has been a far greater demand for manufactured goods than our factories were able to produce, and expansions in all branches of industrial life took place. In addition, large quantities of foreign goods were imported to satisfy the needs of our growing population. The wages of labor steadily mounted upwards. In many industries the hours of work were reduced until the manufacturers of the country were producing goods at a cost greater than the same goods could be imported and offered for sale on local markets. Two results were bound to follow from the increasing cost of manufactured products. One was the substitution of less expensive lines, and the other was the greater increase in foreign imports, both of which had a tendency to curtail manufacturing operations under normal conditions, with the consequent lessening of the opportunities for the employment of labor.

This result was rapidly taking place when the financial reflex from the United States struck Canada, and immediately caused a greater distress than would have occurred if our industries had been manufacturing well within the protection of the Dominion tariff. The disinclination of the banks to support industry to the same extent as before and the gradually calling in of loans deemed hazardous, forced a general curtailment in manufacturing conditions which was first evidenced in the discharge of large numbers of workmen, the reduction in wages, or the working of a short-time schedule.

A Lack of Winter Employment.

At the same period, the cessation of navigation, the closing of the building season, and the general stopping of agricultural work threw on the labor market a very large number of unemployed who are, as a rule, in expectation of being out of employment during the winter months. Owing, however, to the great demand for labor during the past few years, most of these men had been working on forced employment, or had been taken up in the general occupations of the country. This year, however, the opportunities for extra work were not present, and a number have been in a state of enforced idleness for long periods at a time.

With the opening of navigation and the resuming of farm work, a large proportion of the unemployed outside of the city population will be absorbed in active occupations. It will take some time for the surplus of skilled labor to obtain employment, until a normal condition has been restored in manufacturing. The awakening of the building trades will soon engage all the men in that class of work who have been out of employment more largely this season than during past years, but for which they are compensated by larger wages than are paid to factory hands.

The Real Problem.

The chief difficulty with the employment situation is to find occupation for the unskilled and physically unfit workmen who have come to Canada in large numbers, and who, under progressive conditions, would be unable to obtain other than the most temporary employment. Where emigration has been pouring into Canada, and particularly into the industrial centres, as rapidly as it has within recent years, it is to be wondered at that there has not been greater distress due to the difficulty of ready assimilation. Besides the indigent class of immigrants, there are a number who have followed trades in the old country not practiced in Canada, for whom there is the initial difficulty of obtaining ready and continuous employment.

It is estimated that there will be twenty per cent. more land under cultivation in the west than last year, which will take up that proportion more of labor. The steady flow of agriculturists from the United States into the North-West means a greater degree of prosperity for the whole of Canada, as they are skilled in our methods of farm development, and more valuable as producers than a much larger number of general labor. Owing to the larger proportion of our emigration coming from the settled centres of Great Britain there has been a steady drifting to the cities and towns, which has been further augmented by the greater attraction of high wages than in the country districts. This has caused a glut of labor which could not be used in factory work owing to lack of skill, which could not be used in general labor owing to physical unfitness, and which has become a charge on the charitable organiaztions of nearly every locality. For this class of labor there does not seem to be any prospect for work except in the highest occupations, and it is this class that is the most noisy in their demand for occupation, while at the same time being the most unfitted for productive work.

With regard to industrial employment, the prospects look much brighter than they did a few months ago. The situation in the money market has been somewhat relieved, and although industry has not been expanding, there is a more hopeful tone apparent in nearly every department of trade, and a general expectancy that with the opening up of out-door occupations almost a normal condition will once more be established.

A CRISIS IN THE WOOLLEN INDUSTRY

At a meeting recently held in Montreal the woollen situation was thoroughly canvassed. By the evidence of manufacturers from one end of Canada to the other it was shown that the industry could not exist under present conditions. If the woollen industry is to continue it must be protected.

ONCE more the representatives of the woollen industry have presented their case at Ottawa. Their claim was the story of a native industry being gradually starved to death through eminently unfair competition from abroad. A final appeal has been entered for a measure of protection which will give the Canadian manufacturer and the Canadian workman an even chance for the home market. Failing that, there seems to be nothing that will save the situation. The story of closed mills and unemployed artisans will pass from chapter to chapter until the end.

A powerful argument was presented to the Ministers, of whom Sir Wilfrid Laurier and Hon. Messrs. Fielding, Graham, Pugsley and Sir Frederick Borden were present. It was pointed out that importations show an average of $18,000,000 a year for the past five years. It would take an approximate investment of $10,000,000, with an employment of 9,000 people, and a payroll of $5,000,000 a year to take care of that business. The following table is instructive :

	Importations of Woollen Goods.	Increase.
1902	$12,623,107	
1903	15,130,302	$2,507,195 over 1902
1904	16,854,931	1,724,629 " 1903
1905	17,563,514	708,583 " 1904
1906	19,381,666	1,818,152 " 1905
9 months of 1907	16,136,308	
3 months (estimate to make make up year)	5,378,736	2,133,378 " 1906
	$21,515,044	

The population of Canada in 1902 was estimated at 6,000,000, in 1907 6,500,000, showing an increase of 2 per cent., while the importation of textiles increased ten per cent. The per capita consumption of imported goods in 1902 was $3.28, and in 1907 $4.35, an increase of 35 per cent. Allowing an increase of 15 per cent. as the limit in purchasing power this shows a loss to Canadian mills of from $8,000,000 to $10,000,000 a year.

In regard to wages in the woollen trade in England a recent report by the Bradford Board of Trade (Chamber of Commerce), after first increases had been allowed, showed the following scale:—

Sorters, all male, 30s. a week.

Combers, 40 per cent. male, 27s. a week.



The buildings of the Canada Woollen Mills in Hespeler. They represent a large investment of capital, which has been without earning power for the past five years through the insufficiency of the tariff.

Combers, 60 per cent. female, 18s. a week.

Dyers, all male, 22s. a week.

Spinners chiefly female, 9s. to 12s. 6d. a week.

Weavers, 20 per cent. male, 29s. to 35s. a week.

Weavers, 80 per cent. female, 12s. 6d. to 18s. a week.

Wages in Canada are governed by those in the United States, and are from 60 to 150 per cent. higher than those of Great Britain.

The Department of Manufactures of Washington last year, through the consuls in Germany, procured figures of wages and hours in that country, from which the following figures are taken:

Before the latest rise the operatives, both sexes, divided into four classes, earned as follows:

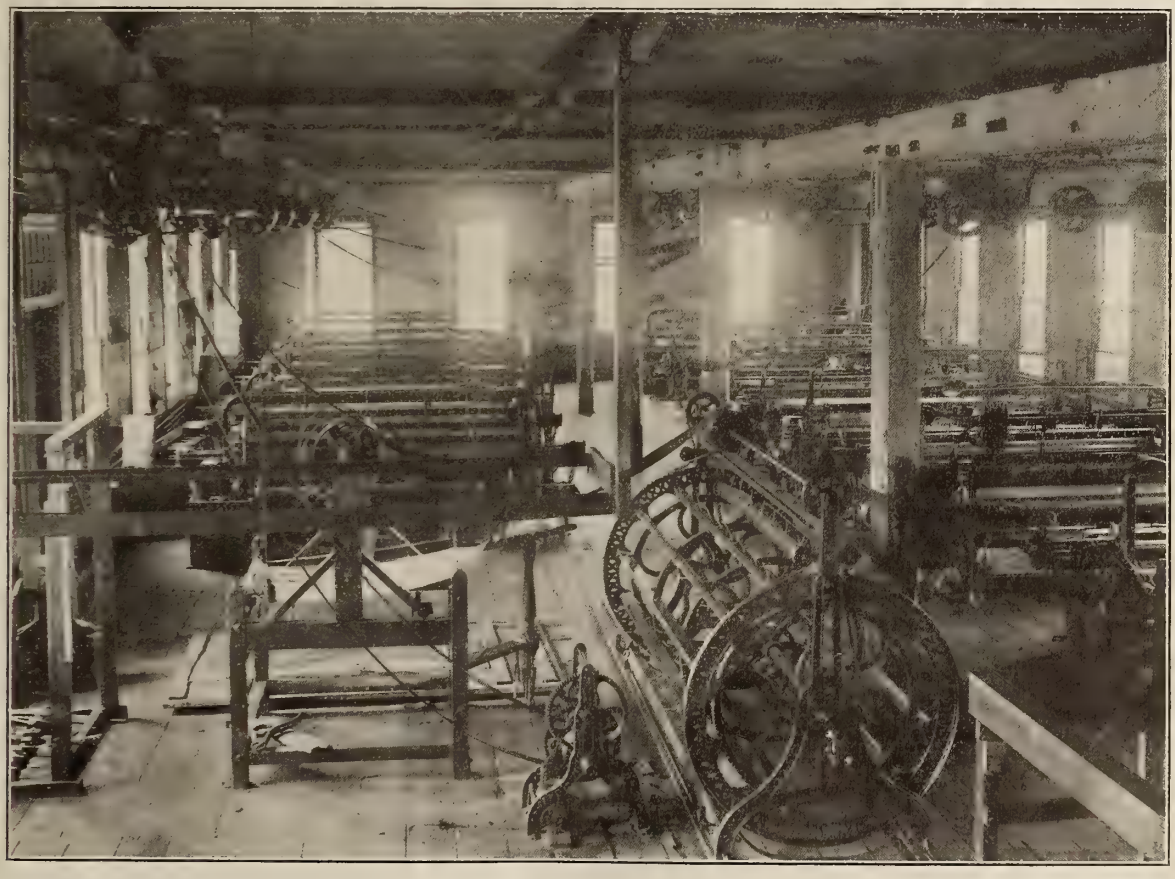


Woollen Mills at Almonte which no longer keep a busy staff of employees working.

Up to 16 years of age	$2.47 a week.
16 to 21 years	3.08 a week.
22 to 55 years	3.83 a week.
Over 55 years	3.18 a week.

In some cases wages are now as high as $4.28, and some as low as $1.67 a week. Families are really small, and subsist on from 16 to 18 marks (1 mark = 25 cents) per week, which includes rent, clothing, food, fuel and other necessaries. They generally live in two rooms (a kitchen and one other room), in which all the family cook, eat and sleep. Working hours in Germany are 10½ hours a day, or 63 hours per week.

From these statements, which are amply borne out by figures, it is shown what the competition from abroad means. There is no class of the Canadian people now which does

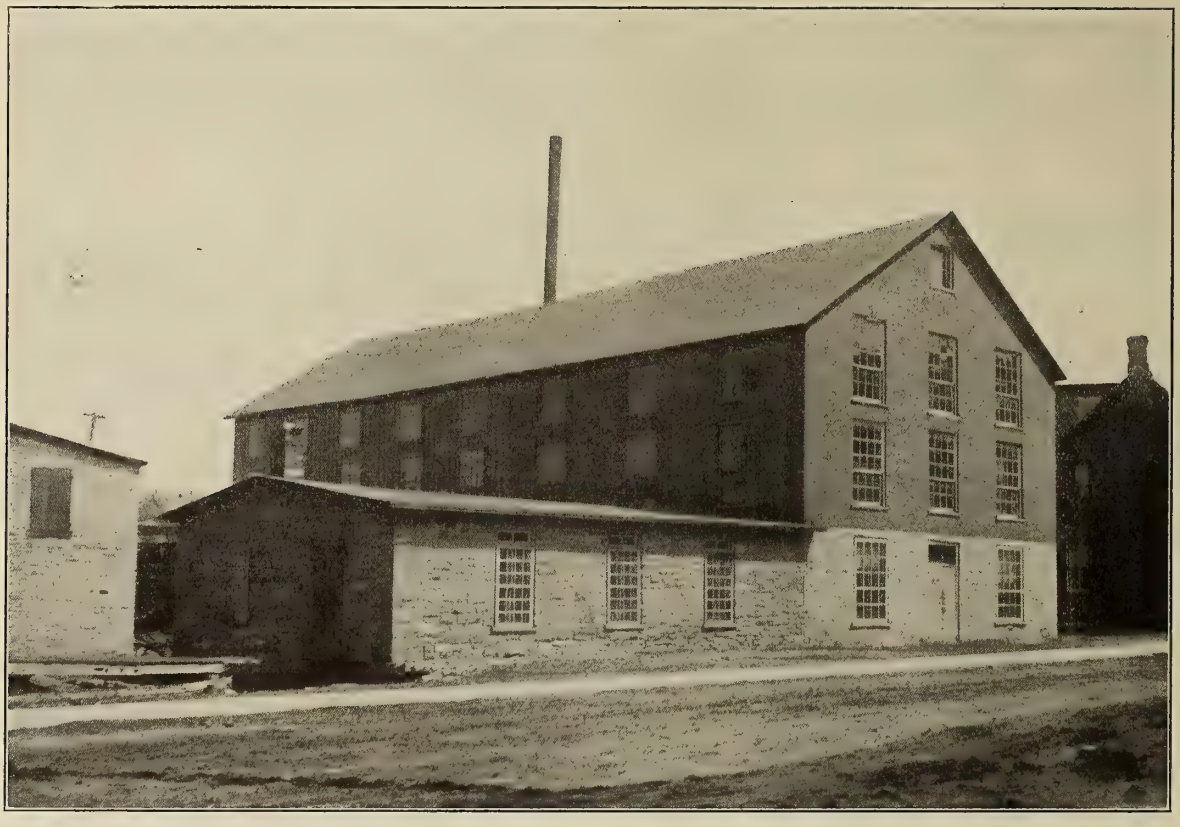


The wheels are no longer turning in many of the woollen mills of Canada. A native industry is being strangled by unfair competition from abroad. There will be many others in a similar predicament unless the tariff is adjusted.

not appreciate the necessity of manufacturing industries to the welfare of the nation. Of these none seems to be comparable in importance with that which provides the nation with clothing, textiles. It is the first and essential complement to agriculture. It should be fostered with all possible care, that Canada may be as far as possible self-supporting in the necessaries of existence.

To establish this condition the Government is urged to raise the duty on woollens. Under the protection given by the old National Policy the woollen industry spread out. The small mills were strengthened and increased in size. New mills were established. The condition is shown at a glance by the subjoined table, which gives the number of mills, looms and spindles in operation at different times:

	1885.	1899.	1907.
Number of mills	240	270	217
Sets of cards	515	624	579
Looms	1,885	2,645	2,034
Spindles	107,870	194,086	188,254



The Wylie Woollen Mills at Almonte which are now lying idle, as a result of the unfavorable conditions under the present customs tariff.

The figures are taken from the Canadian Textile Directory.

The growth from 1885 to 1899 is just as favorable as the decline after 1899 is unfavorable. The cause is easily explainable. It is not the result of any falling off in use. On the contrary, the import figures show an enormous increase in Canadian purchases. The disappearance in eight years of 53 mills, representing 45 sets of cards, 611 looms and 5,832 spindles, instead of an increase of that amount, is directly attributable to the granting of the preference to Great Britain. The British manufacturers manufacture much more cheaply than we can do. The duty against them does not offset the advantage they have in cheaper labor and material. Hence, Canadian mills are put out of business and Canadian workmen are scattered to the textile centres of the United States.

The next move rests with the Government. It remains for them to say whether the industry will stand or fall. The situation has become critical.

MARKING AND ADDRESSING FREIGHT.

SHIPPERS will recognize the great importance of the subject discussed in the following circular, recently issued by the Freight Traffic Department of the C.P.R. The correct and legible marking of packages is absolutely essential to the expeditious handling of freight. An observance of the recommendations contained in the letter will operate to the interest and satisfaction of shippers no less than to the efficiency of the railways. The circular is as follows :

The attention of all concerned is again directed to the necessity of fully marking all freight.

1. Each package or piece of less than carload freight forwarded all rail, also each package or piece of carload and less than carload freight forwarded "lake and rail" must be plainly marked with the name or initials of the consignee and the destination in full, so as to ensure prompt delivery, even if separated from the waybill.

2. Marks on packages should be compared with the bill of lading, and correction, if necessary, made by the shipper or his representative. Old marks must be removed or effaced.

3. Tags should not be used when the nature of the goods will permit of the address being stencilled on packages. If this be not possible, some distinguishing mark or brand must be placed upon the goods, and must be shown in the bill of lading. Agents must transfer such mark or brand to the waybill, which must describe the goods fully. For example, in the case of a shipment of canned goods, the bill of lading (and also the waybill) must show so many cases of tomatoes, so many cases of pears, so many cases of corn, etc., as well as the brand and the mark indicating the consignee and destination.

4. The marks on the packages must correspond with those shown in the bill of lading. For example, on a shipment to Winnipeg the packages must be marked "Winnipeg," and not some other destination for which the goods may be ultimately intended. If packages are intended for redistribution beyond,

a special designating mark may be used for the guidance of those attending to the redistribution, but only the destination given in the bill of lading must be shown on the goods.

5. Frequently, in connection with lake and rail shipments, there is on the same boat more than one consignment for one consignee. In order to prevent such consignments from becoming mixed, it will greatly facilitate their correct handling if shippers will also show on packages their name or trade mark. Consignments can then be delivered complete, and errors avoided.



These buildings are the Canada Woollen Mills plant, closed 5 years ago. A 20 set Woollen Mill, fully equipped with fine machinery.

6. Freight consigned to a place of which there are two or more of the same name, must not be forwarded unless the name of the county and province be given.

7. When a shipment is destined to a point beyond the line of the Canadian Pacific Railway which can be reached by more than one route, either rail or water, agents must be particular to have shippers specify via what route the goods are to be forwarded.

8. If freight is consigned to a point not reached by any railway line, shippers must specify the railway station at which delivery is required, and the route, or if destined to a place reached by a water line, the name of the railway station at which delivery is to be made to such water line.

The proper marking and addressing of freight is as much in the interest of the shipper as of the carrier. Neglect in the proper addressing of packages may result in the loss or miscarriage of the goods.

TRAFFIC ON GRAND TRUNK PACIFIC.

THE appearance during the month of freight tariffs on the Grand Trunk Pacific Railway is interesting as marking the opening of some sections of this transcontinental line to commerce. As yet, provision is only made for handling settlers' effects, seed grain, etc. This is done on construction trains for the benefit of settlers who are already seeking land along the new line. The tariffs which have been issued cover the line from Portage la Prairie to Rea, Man., which is all that has been passed so far by the Board of Railway Commissioners.

CANADIAN CONSTITUTIONAL DEVELOPMENT.

This is the title of an interesting volume of 472 pages, just issued by the Professor and the Lecturer in Colonial History in Oxford, Mr. H. E. Egerton and Mr. W. L. Grant. (John Murray; price, 10s. 6d.). The book gives the essential portions of selected speeches and despatches, with explanatory notes, and offers for the first time to any one interested in the history of our Government a reliable and illuminating resume of matter scattered in many places, some of them inaccessible.

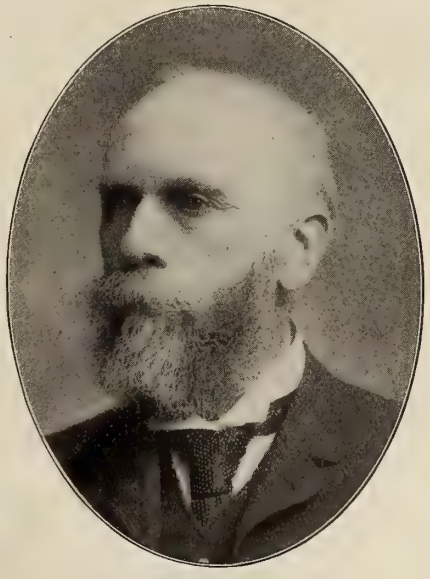
Canada's constitutional history is a history of mingled motives and tangled influences. To ponder over it is well worth while; for from a study of it we come back to the public duties of the present with feelings of greater patience, wider toleration, and more assured hope. The new Oxford Chair in Colonial History has performed a valuable service to Canadian and Imperial thought in this work. We trust that the editors will now carry their review further, into the field of Local Government, into the field of Federal orders-in-council, and day-to-day political practices, and into the domain of the operation of our Governmental machinery. That, of course, means a big contract; but the problems of the present call for energetic, impartial investigators, who will go to the heart of things, and give their diagnosis to the public, already growing restive.

MR. JOHN TORRANCE DEAD.

Mr. John Torrance, President of the Canada Horse Nail Co., Montreal, died in that city on April 6th, at the age of 73, after a short illness. Mr. Torrance was prominently connected with the business life of his city. For half a century he had been engaged in the ocean steamship business in Montreal, as an active member of the firm of D. Torrance & Co. He will be greatly missed by the wide circle of acquaintances which he had gathered around him during his long and busy life.

DEATH OF MR. JOHN COWAN.

With regret we record the death, during the past month, of Mr. John W. Cowan, of the Cowan Co., Toronto. Mr. Cowan had won exceptional success as a manufacturer, having established a business the products of which were known from one end of Canada to the other. He was a prominent member of the Canadian Manufacturers' Association, of the Executive of which he was a member for several years and up till the time of his death. His death removes a prominent figure in Toronto's business world.



The Late Mr. John Cowan.

WHAT A COST SYSTEM WILL ACCOMPLISH

By L. E. Bowerman

Of Copeland-Chatterson-Crain, Limited, Toronto

A cost system covers the following points: It is a record and check of material and supplies .... It is a record of the day's work of each producing workman .... It is a true division of the general expense by departments .... It is a sub-divided comparison of all expense and units of cost.

WHILE it is generally recognized by all manufacturers that a knowledge of the cost of manufacture is necessary to the successful prosecution of a business, it is a matter of question whether the average manufacturer actually possesses this most essential knowledge, or has arrived at a crude apology for it from a series of deductions, rather than from an actual practical basis.

Now, a practical Cost System, when carefully planned and applied to any industry, means the saving of both time and money; and in connection therewith, the first essential is to acquire an intelligent grasp of factory conditions and requirements, so as to enable an expert accountant to devise the System and to arrange for the thorough and economical operation of it.

In Canada it has been our experience that a Cost System devised for one firm in any particular line of business will seldom successfuly fit the needs of another firm in the same business. In other words, we find it poor policy to try to install and operate a System devised for one furniture factory in any other furniture factory. This means that the conditions governing the manufacturing done by each concern must be studied out carefully and taken care of individually.

The expense connected with the operation of a Cost System is probably the greatest reason for lack of adoption of up-to-date cost methods by some of our largest manufacturing concerns. This is certainly holding a ten-cent piece so close to the eye that a $10.00 bill cannot be seen beyond it, as many firms who have introduced Cost Systems have been so greatly surprised at the results, loss and gain considered, that certain articles manufactured at a loss have either been discontinued or brought up to a paying basis, while exorbitant prices for other items have been adjusted in a way that has resulted in increased consumption.

Many efficient Systems of Cost-Keeping, in all lines of manufacture, are frequently valueless, owing to the failure to keep in mind the fact that a good System is but the means to an end, not an end in itself. If properly operated, it should be as much a direct influence towards increased profits as a perfect mechanical organization or any selling improvement.

An essential point in connection with the operation of a Cost System is that all detail should be kept strictly up-to-date. This brings every activity of a factory down to the smallest detail, promptly before the management, and thus prevents leakage. It also assures a close check on all material and labor, and shows the condition of every order in the factory.

In the cost of all manufactured articles there is a distinct combination of three elements: Material, Labor and General Expense.

Material is that which is used in making the article, and which enters into and becomes part of it.

Labor is the work directly put upon an article, turning the raw material into the finished product ready for the market.

General Expense is made up of such labor and other expense which in an indirect way enter into the making of an article, and is commonly called Over-head Expense. Of course, non-productive labor is kept track of separately in the department in which it occurs.

Material, the first element, calls for thorough Purchasing and Stock-Keeping Systems, and these are the first requisites of an up-to-date Cost System.

Stock should be so kept that all materials can be easily traced, both coming in and going out of the factory, as well as Tools and Supplies of all kinds. On this point carelessness is shown in many factories. All material coming in should be properly recorded on a Stock Record, and nothing whatever should be withdrawn from stock without a requisition properly signed, showing exactly what the goods are for.

The Stock Clerk enters this withdrawal on his Loose Leaf Stock Sheets, and, of course, naturally charges all material to the department which has used it. The foremen thus become economical, using as few supplies as possible and making up the product from the smallest amount of raw material.



L. E. Bowerman

Provision should be made for recording the spoilage of material at the process where the loss occurred, so that the loss may be charged to the department which is responsible for it.

A System of this kind enables the stock clerk to account for all material. The purchasing department can work with him in buying exactly what the factory needs, and this, of course, throws a safeguard around the factory production against delays and losses which naturally follow negligence and faulty information.

Productive Labor is gathered from the record of work done by each workman. This he keeps on a daily time sheet, which is generally made up on the Loose Leaf style. From

these Time Sheets it is an easy matter for the Cost Clerk to trace from hour to hour and job to job the time taken by the workmen. These time sheets should be so arranged that the workman will not be called upon to take too much time in writing them up. He should not have to write a single word, but simply put down in figures the order number, and by a series of strokes across the face of the sheet, indicate the number of hours worked on each order. This saves time, eliminates possible errors, and gives the Department Manager a complete check and an intelligent understanding of exactly how long the workman took for each job, and also whether or not all of each workman's time is clearly accounted for. This, of course, should be checked up daily. Each morning new time sheets are placed in the hands of the workmen, which must be filled out as each job is completed during the day, not at quitting time, unless the job be unfinished.

Workmen's time sheets are really the foundation stone of Cost accounting, and an accurate record of cost cannot be made unless each and every workman or some competent employee in the factory keeps a correct record of the time spent on each job or order. This is nothing more or less than a series of tabulated costs made out step by step as the work passes through the factory from the rough state to the finished article.

Nearly all factories keep track of their costs by departments. A regular ledger account would sometimes answer for each job or order provided it is of sufficient importance, and takes an appreciable number of days for completion. Other jobs of a lighter nature are bulked and the cost reckoned from the workman's time sheet.

Each workman, whether at bench or machine, should be furnished with time sheets, and this brings up another point, viz., that the workman at the bench does not cost as much as the workman at the machine because there is the wear and tear on the machine to be taken into consideration, and also the fact of the initial outlay.

Therefore, when these time sheets come to the cost clerk they must not merely show the labor cost of an article but also the machine cost.

A certain standard is established as the cost of different operations in the factory. The standard is set at one hundred per cent. All duplications of every operation are figured against this basis.

Suppose $1.00 is the standard cost for the finishing of a parlor chair. The workman who puts five hours and fifteen minutes into the work at 20c. per hour, or $1.05 in cost—in other words, one-twentieth more than the standard cost—is given a percentage of 105. If he performs the operation in four hours and forty-five minutes at 20c. per hour, this brings the percentage down to 95c. Now, with this percentage this workman has saved 5 per cent. on five hours. The skill of this workman should be taken into account, and suggestions passed along by the department head to his other men, so that his department could be bettered all along the line.

The general expense should be classified according to departments. The factory should be considered a collection of small factories; each separate from the other. If an article, during its making, passes through several departments, it is not right to charge the same percentage for each process. The amount of general expense should be analyzed by departments and charged to them individually, as far as possible, or, at least, pro-rated as near as a cost clerk can determine.

Chargeable directly to the departmental expense are these items:

Floor rent, taxes and insurance.—The proportion of rent which shall be charged to any department is determined by dividing the monthly rent by the number of square feet in the plant, then multiplying the rent per foot by the number of feet in the department. The proportion to charge for taxes and insurance can be ascertained in much the same way.

Machinery rent.—Each department is charged with 6 to 7 per cent. of the valuation of all machines as interest on investment in annual depreciations.

Heat.—Each department is charged with heat according to the proportion of its space to the entire area of the plant.

Light.—Each department is charged with light expense according to the number of lights it has in proportion to the other departments.

Power.—When an individual motor is used for each machine, or set of machines, the amount of power to be charged can be accurately determined by the reading of the motor. When the mechanical equipment will not allow this, each department is to be charged with a proportion of the power expense according to the number of machines they operate.

Supplies.—All tools, supplies and materials used are charged to that department by the store-keepers as they are drawn out on requisitions.

Time-keeping expense is pro-rated according to its percentage of the total pay roll.

This classification takes care of every expense outside of selling, and enables the Cost-Keeper to determine an accurate general expense percentage for each department. The general expenses to be charged to each department are totalled monthly, and the percentage to the productive labor determined.

The sum of material, productive labor and departmental general expense, therefore, gives the total manufacturing cost of a product. To assemble the total cost of production of an article, the materials used, as reported from the stock-room, are figured into money; material cost includes the purchase price, transportation charges, and expense of buying, and handling, as shown by the expenses of the purchase department. Then from the workmen's daily time sheets, as they come in, there is taken off the number of hours of productive labor put in on the article, figured in money, in departmental groups. Next the machine rates are added. Then all repairs and special work on parts are brought in. And, finally, there are added the various department overhead percentages.

Summing it all up:—

A Cost-System covers the following points:

It is a record and check of material and supplies.

It is a record of the day's work of each producing workman.

It is a true division of the general expense by departments.

It is a sub-divided comparison of all expense and units of cost.

THE MACHINE.

By Margaret Ashmun.

Who calls this shape a dull, insentient thing—
A blind device for mere and stupid gain?
He has not watched with wonder in his brain
Its rhythmic process, heard it whir and sing,
And, inly thrilling, felt the fateful swing
That moves its rods with grim, tremendous strain;
He has not seen the marvel, subtly plain,
In silken slide of band and wheel and spring;
Else would he cry, "Behold, there labors here
A visible intelligence—a mind
Made up of many minds, that, year by year,
Have thought and dreamed, resolved to seek and find,
Till now stands this—clean, exquisite and sheer—
The concentrated genius of mankind!"

—The Technical World.

IS A RAILWAY FROM WESTERN CANADA TO HUDSON'S BAY FEASIBLE?

Several conditions peculiar to this route should be carefully considered before the project is undertaken by the Government. The extremely short season, the lack of return traffic, and the dangers besetting vessels in the Straits, are the chief obstacles.

MR. W. E. KNOWLES, M.P., is urging upon the Federal Government the advisability of building a railway to Hudson's Bay, connecting with the transcontinental lines somewhere in the Middle West. Such an undertaking should be assumed only after careful consideration. We take it as a self-evident truth, with Mr. Knowles, that what will benefit the farmers of the west will in the long run benefit all Canada. The only question to be decided is, will such a road be of material benefit to the west? That is a question that requires a consideration of many conditions, a consideration which it can scarcely be claimed has been given to the project yet, or if it has, it has not been communicated to the public in a convincing manner.

A report of Mr. J. A. McKenna is cited by Mr. Knowles as follows:

"The freight upon grain from the wheat belt to Hudson's Bay would approximate ten cents a bushel, the same as to Port Arthur; the additional fifteen cents from Port Arthur to the Atlantic seaboard would be saved to the farmer, and this of itself represents a fair profit to the wheat-grower. Assuming an export trade of 20,000,000 bushels, which can easily be handled in two months of the season by the proposed railway, the saving of fifteen cents a bushel would amount to $3,000,000."

The building of the proposed railway should depend upon its being able to give a cheaper service than is now possible. Hence it is particularly important that we should have correct figures upon which to base our conclusions. As a matter of fact, it costs to carry wheat from Winnipeg to Fort William, on the average, six cents a bushel; from Fort William to Montreal or New York, six to seven cents a bushel by lake and rail, or five to six cents a bushel by the all-water route. The average rate for a number of years on wheat from the head of the lakes to Buffalo has been 1.56 cents a bushel; from Buffalo to New York, all rail, 4c. to 4½c.; and via canal, 3.15 cents a bushel. At one stroke the cost of the existing route, as quoted by Mr. McKenna, is reduced from fifteen cents to about six cents a bushel.

The initial cost of building the road would not be less than $20,000,000, which is less per mile than the estimate for the new transcontinental line. (Fifty thousand dollars per mile has been set down for that.) The cost of terminals, elevators, etc., would approximate $4,000,000, and if extensive harbor works are necessary would run much more than that. Of rolling stock there would be needed seventy-five locomotives and three thousand cars. This estimate is arrived at by figuring the number of trains of normal size that it would take per day to carry 20,000,000 bushels of wheat during the season. At $14,000 for a locomotive and $1,000 for a freight car, these items would involve a further expenditure of $4,000,000. We have thus an original capital expenditure of $28,000,000, upon which an annual interest would have to be paid of $980,000 at 3½ per cent.

On the old-established roads, with complete organization, the cost of handling business is 70 per cent. of the gross revenue. It now costs, at the outside, twelve cents a bushel to carry wheat from Winnipeg to Montreal. The Hudson's Bay road would have to give at least as good a rate. This would give a maximum revenue of (on 20,000,000 bushels) $2,400,000. Seventy per cent. of this for operation would be $,1,680,000; leaving $720,000 for general charges. But the bare interest on bonds, at a most conservative estimate, would amount to $980,000. Where would the $260,000 come from?

The chief difficulty is that the road would be capable of being used only for a single purpose, during a limited period of the year. It would be dependent for its income upon the transportation of wheat and cattle during the short time while navigation is open in the straits. Not more than six or eight weeks at the outside would be open after the harvesting of the crop. Hence abnormal rates would necessarily have to be charged for what freight it did handle to pay interest on the investment and operating expenses.

The lowest cost at which freight can be carried by an old road, with a complete organization, is half a cent a ton a mile. This is what the railways figure when they are hauling material for their own use. For the 470 miles this would be 2.35 a ton for the length of the road, or seven cents a bushel. But the train would have to return the full distance for a second load, and as far as has been shown, it would have to make this return trip empty. So the cost would be doubled, as the cost of the return trip would have to be met by the charges on the original load. Thus the lowest possible charge, so as to meet the bare cost of operation, would be furteen cents a bushel, as against a maximum of twelve cents by the lake route.

A most peculiar situation would arise, also, from the fact that a large staff of men, from despatchers and train crews, down to ordinary laborers, would be employed for only two or three months in the year. It is no argument to say that one of the other companies might operate the road, and would absorb both rolling stock and employees. As a matter of fact, when the Hudson's Bay Railway closed for the year, the main rush would be over on the other lines, and they would be laying up part of their own equipment rather than adding to it by taking over that of other roads. If the railway was to be of any real benefit, it would be by supplementing the service now rendered. This it could not do except by providing rolling stock over and above what the transcontinental companies owned.

The proposition is further complicated by the conditions surrounding the ocean traffic, with which it is bound up. A large fleet of boats would be necessary, as any congestion at Fort Churchill would be ruinous. These boats would have to be heavily subsidized. They would be operating under most unadvantageous conditions. The admittedly dangerous nature of the route would entail extraordinary marine insurance. Only a fraction of the boats' capacities would be taken up by return cargoes. Shipping charges on the east-bound traffic would have to cover the cost of the return trip. Thus, on the ocean end of the traffic, also, the charges would necessarily be abnormal.

The conditions which would militate against the success of the scheme are, in brief, the absence of any appreciable amount of local traffic, with small prospects of an improvement in this direction; the lack of return loads, making the charges on the original traffic abnormal; the shortness of the season, whereby the whole cost for investment and operation would have to be met out of a few weeks' business; the difficulty of getting adequate shipping facilities for conveying grain from Fort Churchill to Europe, and the extraordinary cost of the same.

These are some of the questions which should be investigated before such a large project is undertaken. If satisfactory answers can be given, by all means let us have the road.

THE WHEELS OF INDUSTRY



Tracks are now renewed without much interruption to traffic. This cut shows the method of operation in Toronto. Temporary tracks are laid on each side of the street and cars are operated on these, leaving the centre of the road free for work.



A Shipping Scene at Toronto. As summer comes on the harbours become alive with boats which enter into competition for the freight which is offering. The view given was taken in the ship-yards of the Polson Iron Works

A TARIFF DEPARTMENT ORGANIZED

Members Can Now Get Expert Assistance in Tariff Difficulties

A STEP of far-reaching importance to the Association is marked by the establishment of a department which shall be devoted entirely to the assistance of members where difficulties in tariff matters arise. Every manufacturer has his own tariff problems. In most cases it is impossible for the individual to have these satisfactorily settled. It will be the work of the new Department to go into these questions thoroughly and seek a remedy only when the justice of the request is clearly shown.

The need of expert assistance has long been felt. The tariff has grown increasingly complicated from year to year. From a single scheme it has become most complex, embracing a general, an intermediate, and a preferential scale, and these, with surtaxes, favored-nation treaties, dumping clauses, leeways, fines and drawbacks, have made it practically impossible for the ordinary business man to know where he is at. It requires a specialist to follow the intricacies of the



R. W. Breadner

customs system. It was felt that the expert assistance which has proved of such immense value to the members in the case of Transportation and Insurance should be supplemented by similar assistance in tariff difficulties.

The Association is fortunate in having secured the services of Mr. R. W. Breadner as Manager of the new Department. Mr. Breadner has a thorough knowledge of the tariff and the way it is administered. At the present time he is a member of the Board of Customs and holds the offices of Dominion Appraiser and Inspector of Customs. He is consequently closely in touch with actual conditions under which the tariff is operating. His intimate acquaintance with the situation will enable him to adjust difficulties with the utmost despatch.

As has been found to be the case in the other departments much can be done by the man who knows just how to go about it. The individual is not in a position to make an effective fight. He is handicapped by an unfamiliarity with the methods of carrying on business. Many of the small things, the petty annoyances, which during the year may result in considerable inconvenience and loss, he is unable to remedy. In these cases, and they are many, the tariff expert will be able to render valuable assistance.

Again, when it becomes necessary to present a case at Ottawa, Mr. Breadner will be of inestimable service. His previous experience will suggest to him what facts are essential and how the case should be handled. Industries are so interwoven with one another that changes in the tariff may have an effect extending far beyond what was originally anticipated. A previous investigation of the conditions will obviate many later difficulties.

It goes without saying that the work of the new department will not be confined to urging claims for increased protection. In fact this may prove a minor part of Mr. Breadner's duties. As has been indicated above, the complexity of the tariff gives rise to innumerable difficulties of classification, appraisement, etc. There is ample along these lines alone to make necessary the appointment of a tariff expert. Some industries are sufficiently protected by the existing tariff and make no request for more. Others which are seeking further aid are suffering from disabilities which no tariff would remove. Others again have legitimate grievances. It will be the work of the new Department to sift these out, to get at the actual conditions, and to advise the Association on the fairness of the demands.

The value of any department of the Association's work depends largely on the use the members make of it. The new Department will be in operation during the present month. Members should make their difficulties known and seek a remedy through the offices of the Association.

FOREIGN MAILS.

Mails for the East, including Australia, New Zealand, China, Japan, and smaller states, will be sent during May as follows ·

Mails leave Vaucouver, B.C.—For China and Japan, 11th.

For Australia, except the colony of West Australia, which are sent by England, New Zealand, Fiji, and Hawaiian Islands, 22nd.

Mails leave San Francisco.—For Japan, Korea, Shanghai, Hong-Kong, and dependent Chinese ports; and for the Philippine Islands, also specially addressed correspondence for the East Indies, including British India, Straits Settlements, Siam, Cochin China, and Dutch East Indies, 19th, 26th and June 2nd. For Hawaii, 2nd, 5th, 9th, 15th, 19th, 23rd, 26th and 29th. Guam and the Philippine Islands, 5th ; Tahiti and Marquesas Islands, 20th. For New Zealand and Australia, except Western Australia, which are sent via England, 8th.

Mails leave Seattle, Wash.—For Japan, Korea, Shanghai, Hong-Kong, and dependent Chinese ports, and for the Philippine Islands; also specially addressed correspondence for the East Indies, including British India, Straits Settlements, Siam, Cochin, China, and Dutch East Indies, 12th, 15th and 26th. Specially addressed correspondence for and via China and Japan, 9th.

Mails leave Tacoma, Wash.—For China and Japan, 13th.

To insure connection, correspondence for China, Japan, Korea, Australia, New Zealand, Sandwich Islands and Fiji should be posted in Toronto five days before the dates of sailing from Vancouver and six days before the dates of sailing from San Francisco, Seattle, or Tacoma.

THE BASIS OF MANUFACTURING INDUSTRY

By Thos. R. Deacon

President, the Manitoba Iron Works, Winnipeg

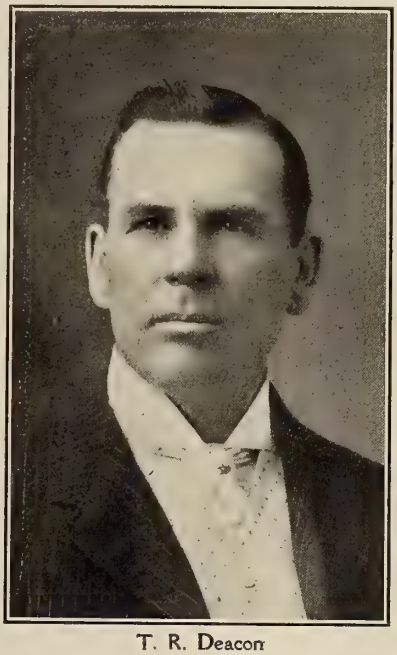
Industrial life is like a game of chess. The world is the chess-board; the natural resources and phenomena are the pieces. To win requires a knowledge of the rules and the possibilities of the game. That is what technical education means. It supplies the necessary knowledge.

WHENEVER we enter upon the discussion of any subject, it is well to have a clear and concise idea of what the subject actually means, and so, after casting about in my mind for such a definition of technical education, it seemed to me that it might be described as "a correct knowledge of those natural laws which govern the results of the operations of man or material substances." As the life of man becomes more complex and the members of the human family continue to multiply, it becomes a necessity that all forms of waste should be curtailed, whether of force or of matter, and that all forms of labor and material should be made as fully effective for our requirements as possible. And as all forms of force, energy and matter, move always in obedience to natural law, it becomes at once apparent that to be equipped to utilize these forces in attaining the results we desire, and to guide and direct them in our own work, we must be acquainted with their fundamental principles.

Suppose it were perfectly certain that the life and fortune of every one of us would one day or other depend upon his winning or losing a game of chess, do you not think that we should all consider it a primary duty to learn at least the names and moves of the pieces, to have a notion of the game and a keen eye for all the means of giving and getting out of check? Do you not think we should look with a disapprobation amounting to scorn upon the father who allowed his son, or a state which allowed its citizens, to grow up without knowing a pawn from a knight? Yet it is very plain that the life, the fortune and the happiness of every one of us and those connected with us, do depend upon our knowing something of the rules of a game infinitely more difficult and complicated than chess. It is a game that has been played for untold ages, every man and woman of us being one of two players in a game of his or her own. The chess board is the world, the pieces are the natural phenomena of the universe, and the rules of the game are what we call the laws of nature. The player on the other side is hidden from us. We know that his play is always fair and just and patient, but we also know to our cost that he never overlooks a mistake nor makes the smallest allowance for our ignorance. To the man who plays well, the highest stakes are paid with that sort of overflowing generosity with which the strong delights in his strength, and the one who plays ill is checkmated without haste and without remorse. The learning of the rules of this game is technical education.

The Working of Natural Laws.

As men began by experiment and by deduction to learn something of the great code of natural law, it soon became necessary to classify these laws and group them in such a manner as to be easily referred to, and thus we know them under the names of various sciences, such as Mathematics, Physics, Statics, Dynamics, Chemistry, and these again subdivided under many heads, as Arithmetic, Algebra, Geometry, Trigonometry, Differential and Integral Calculus, Astronomy, which is really a combination of all kinds of mathematics and chemistry, which is subdivided into innumerable divisions, but through all which the same universal laws obtain, whether applied under the head of metallurgy, mineralogy, or of organic chemistry; and it is the understanding of these laws which has enabled man to accomplish his marvels on the planet. There has never been a time in the history of the world, when it was more necessary than it is now, that the citizens of any country which hopes to hold its own in the advancement of the world where competition is so keen, should be thoroughly equipped for the game by a comprehensive and accurate knowledge of its laws so that they may make no mistakes and that all forms of energy and material shall be conserved. It am glad to see that the Provincial Government of Manitoba has recognized this fact, and that while our lands are still young and the soil vigorous, they have proceeded to place the greatest of our present industries, agriculture, on a scientific basis and have established an Agricultural College. This is much better than waiting until the land had become lean, and then endeavoring to devise means by artificially assisting nature to refertilize the soil.



T. R. Deacon

Must be Supplemented by Manufactures.

But we do not find that history records a single instance of any nation achieving permanent greatness based solely on agricultural or pastoral pursuits. We must have manufactures and other lines of commerce, and as the agricultural interests are, in the last analysis, the purchasers of all kinds of manufactures, it becomes evident that if we of the West are not always to remain dependent on the older lands for our manufactured goods, we must set about learning how to manufacture them ourselves. And how can we do this unless our young

men have facilities for acquainting themselves with the natural laws which govern these things.

As at present agriculture seems to tower in importance over all other interests, we are apt to overlook or neglect many of the sources of wealth, and year by year vast quantities of raw material are allowed to go to waste, simply because we have not yet learned how to use them. We have the example of Germany, who, finding the population growing, and no chance for territorial expansion in Europe, deliberately set herself with a new energy to discover by scientific investigation methods of increasing her natural wealth by supplementing her resources by new processes of using hitherto unemployed material, and we find her in a very short time becoming one of the greatest manufacturing nations in the world, holding the blue ribbon of the Atlantic for the fastest ships that ride the seas, and producing goods so cheaply as to be regarded by other nations as a menace to their trade. Japan, also, by a systematic investigation and adoption of technical knowledge, has astonished the world with her progress.

What the Boy Should Learn.

It has for some years seemed to me that as Chemistry is of such paramount importance in all the affairs of life, whether we recognize it or not, that it ought to be studied by every boy and girl in the public school from the very first. What is chemistry, or what is its object? Chemistry has for its object the investigation of all those properties of matter which are the result of, or which lead to the transmutation of matter, whether wood, stone, air, or water or flesh or grass. It investigates all the material properties of every kind of matter and every combination of the sixty-seven elements. There is not a single industry that is not based on and dependent upon chemistry. One branch of industry may be based upon the exact knowledge by some one of the chemistry of foods; another the chemistry of fuels, heating and lighting; another on the chemistry of dye stuffs and the materials to be colored; another on the chemistry of iron and steel; another on the chemistry of explosives, and so on. And yet we, who are not acquainted with the details of these processes, accept only the results of their operations without thinking how useful it is to us that some one somewhere understand these chemical laws.

So in the realm of mathematics, we scarcely pause to think how deeply we are indebted to those who have applied the investigation of this and the allied sciences of statics and dynamics, to the removal of mountains of difficulties; who have turned back the sun in its course, metaphorically, by the annihilation of space; who have made the dark places of the earth light, and who, by giving to the thirsty lands rivers of water, have made the desert to blossom as the rose.

And the era of the West has but just dawned. Railroad building has only begun. Many cities are yet to be built between the lake and the mountains. Very probably, many sources of wealth we yet do not suspect are here concealed awaiting our discovery. We must have trained minds to grapple with these problems. The pioneers have done their duty to the full. With the tools at their disposal they accomplished wonders, but so much more is required now in the same time that we must have men whose minds are trained in the habit of thinking right, so that they will come to the correct conclusion in the same manner as the woodman's hand automatically guides the axe.

The Requirements of the Age.

It is said that the age is utilitarian, materialistic, commercial. If so, it is all the more necessary that each man should be the better equipped for the utilization of all the forces at his disposal. But there is another side as well as the strictly utilitarian. There is the development within the man himself of a deep and everlasting pleasure in the knowledge of natural laws, even though it might not be called extensive, that wealth and place even cannot give, and which forms an anchor to the mind and raises and enlightens the whole man, so that the state as a whole benefits by his citizenship. It is said that the principles of carpentry depend upon the two branches of the science of statics, and it is that which makes carpentry a liberal art. So is the art of working iron; so is every art, when guided by scientific principles. Every structure or design that evinces the guidance of science is to be regarded not only as an instrument for promoting convenience and profit, but as a monument and testimony that those who made and planned it had studied the laws of nature, and this renders it an object of interest and value, no matter how small its bulk, or how common its material.

For a century, there has stood in a room in Glasgow University a small, rude model, of appearance so uncouth, that when an artist introduced its likeness into an historical painting, those who saw it, and did not know its meaning, wondered what the artist meant by painting an object so unattractive. But he was right, for a man had taken that model and applied to it his knowledge of natural law and made it into the first of those steam engines which now cover the land and sea, and have been the means of making light the darkest parts of the earth. And ever since, in reason's eye, that small and uncouth mass of wood and metal shines with imperishable beauty as the earliest embodiment of the genius of James Watt. Thus it is that by science the commonest objects are rendered precious, and in a like manner the engineer and mechanic who plans and works with a correct understanding of the laws that regulate the results of his operations rises to the dignity of a sage.

Applied Science in the West.

In conclusion, let me express the hope that at an early date, there may be established in the west, under Government control, an institution devoted exclusively to the various branches of applied science. If we have railroads to build, structures and machines to be designed, natural sources of wealth to be developed, there is no need to import foreign brains, we have a homegrown variety of first-class quality, but it is essential that the young men be trained in the branches of mathematics, chemistry, geology, mineralogy, astronomy, and the other natural sciences, so that they more readily assist in the development of the country. The establishment of these institutions at Montreal and Toronto has assisted enormously in the upbuilding of the commercial and manufacturing life of Ontario and Quebec, and even of Western Canada, and similar institutions will be of immense assistance to the west as soon as they are properly established here.

It is a great mistake to suppose that the momentous discoveries that are being made from day to day, such as X-rays, radium, wireless telegraphy, new heavenly bodies, high speed steel, etc., are the results of ignorant men, blindly stumbling on to these great truths, or that they spring from phenomenal intuitive knowledge of the laws of nature. They are in every case the fruit of highly trained minds, skilled by long years of patient study in the grouping, balancing, arrangement and experiment of natural phenomena, and in most cases, are arrived at step by step by logical deduction, as well as the ability to recognize and detect where a wrong move has been made and to go back to the proper point of departure, and thence proceed, avoiding the previous error. It is the ability to do this that constitutes one of the great advantages of a technical education.

Victoria, B.C., will make extensive additions to its waterworks system, including the building of a reservoir and the installation of pumps and pipes. $100,000 will be expended on the work. Tenders will be called for.

THE EFFECT OF PROTECTION

Mr. Chas. McDonald discusses in a letter to Industrial Canada the effect of protection on a country's prosperity. He suggests that the recent depression in the United States and the abounding prosperity in Great Britain during recent years, may be significant.

St. John, N.B., April 20th, 1908.

To the Editor of Industrial Canada —

Sir :—In "The Editorial View Point" of your April issue, under the heading, "Protection in England," you say, among other things—"For years free traders in Canada have held up England as an example of the wonderful things free trade can accomplish, but it looks at present as if the day was fast approaching when they will not have that peg on which to hang their arguments."

The following editorial, from the "St. John Globe" of April 11th, gives figures and statistics that make one wonder if your view of this matter is correct. It says :—

Free Trade England.

"The pre-eminent position of Great Britain in the world of commerce is strongly set forth in some figures recently issued by the British Board of Trade. For the year 1907 the imports of Great Britain were valued at £553,932,000, compared with £522,786,000 in the previous year. Germany has a far larger population, and its imports were valued at £422,707,000, compared with £394,410,000 in 1906. The population of the United States is over eighty millions, and her imports in 1907 were worth £296,519,000, compared with £275,105,000 in the previous year. France had imports to the value of £241,906,000 in 1907, and £225,090,000 in 1906. A glance at the domestic exports of these countries tells a tale. Great Britain heads the list, with exports in 1907 valued at £426,205,000, compared with £375,575,000 in 1906. The United States came next, with exports of £394,859,000, compared with £275,105,000 in the previous year. Germany had third place, with exports valued at £337,222,000 in 1907, and £312,657,000 in 1906, and France was next with exports of £221,681,000 in 1907, and £210,068,000 in 1906. It will be noted that the increase in British exports in twelve months amounted to over fifty million pounds—an increase far greater than can be shown in any of the countries under protective tariffs. British progress has been unexampled in recent years, and the trade figures furnish the most convincing answer to the statements of the tariff reformers. The British public thoroughly understands the situation, and has shown no indication of a desire to change its fiscal policy. Recent bye-elections have been taken to mean that the Liberal trade policy has been condemned, but that is not a correct conclusion to draw from these contests. The liberal losses, which, after all, have been comparatively few, were due almost entirely to the strenuous fight made against the Licensing Bill, the Education Act, and other progressive legislation."

With these figures staring them in the face, and with the recent sudden and far-reaching depression in trade and manufacturing in the United States, with its boasted high protective policy, is it at all likely that the English people, with "their uncommon amount of common-sense," will change a trade policy which makes such a magnificent showing in comparison ? I cannot conceive that they will, nor can I see they would gain much if they did. If "tariff reform" is the panacea for loss of trade by the manufacturers, why do not our neighbors to the south, under the prevailing depression existing in the United States, increase their duties, stick on a little more "tariff reform," and bring good times out of bad ?

I am not prepared to say to what extent the Canadian manufacturer is benefited by tariff legislation. When attending conventions of the Canadian Manufacturers' Association, I have often thought if the "higher tariff" ideas of the group of manufacturers who do most of the talking in that body, were to come in force, no class of people in this country would suffer more than the manufacturers themselves. I hope, however, that this group of "Haman's gallows tariff reformers" does not embrace as many of the manufacturers as their utterances would make it appear. No doubt they are earnest and sincere in their beliefs, but among the great rank and file of the Association's members throughout Canada, there must be many who hold views of a more moderate and business-like nature. There is an old Spanish proverb that says—"If you go with lame people one year, you will limp the next," and it may be that if you present only one side of this question to the manufacturers, month in and month out, some of them may grow narrow and contracted in their ideas of trade questions. It is well occasionally to have the other side presented, even in such an imperfect way as this. These observations are not made in a controversial spirit, but with the hope that there are many of kindred thought among the Association's members.

I may be in a hopeless minority, but if there are nine other members besides myself who embrace these views, I will feel there is hope for the Association. I will be buoyed up with the remembrance if ten good men had been found in the wicked cities of Sodom and Gomorrah, the wrath of the Lord would have been averted, and the inhabitants spared to ultimately become respectable citizens of the country to which they belonged.

Yours truly,

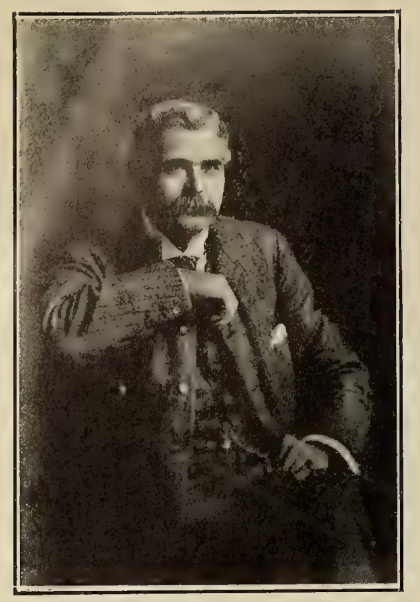
CHARLES McDONALD.

EXPORT QUOTATIONS.

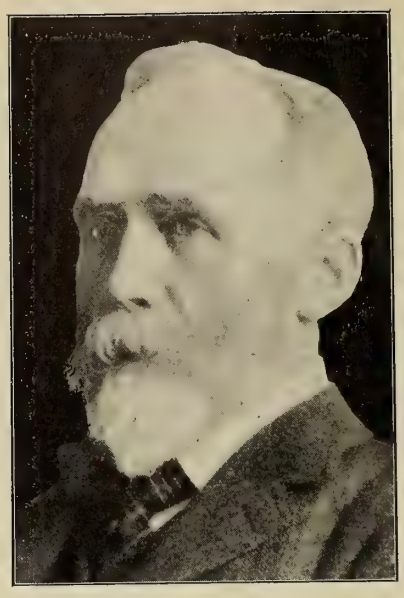
Manufacturers exporting to the continent of Europe, South America, or other sections of the world, where the metric system prevails, will be interested in the following comment on the necessity of Canadian methods being adapted to the requirements of the purchaser. The words are taken from a letter of one of the Canadian Trade Commissioners, recently received, and are well worthy of attention.

Speaking generally, however, I might mention that if Canadian manufacturers propose catering for continental trade, they must be prepared to adapt themselves to the requirements of the country, and quote in the particular measures and weights which are in vogue in that particular country.

The metric system is in force practically everywhere on the continent of Europe, and many business houses have no knowledge whatever of feet and inches. Such frequent reference is made in Canada to the failure of British and other interests seeking trade in the Dominion to adapt themselves to Canadian conditions by quoting in Canadian currency and measures, that Canadian business men should also realize that this applies equally to themselves in seeking trade in outside markets.



J. H. Plummer



James Ross



J. P. Murray

MEN OF THE MONTH

GIANTS IN CONFLICT.

MR. J. H. PLUMMER and Mr. James Ross have held the stage during the past month, but the drama which was being acted by them and around them has been carefully concealed from the public. The fight which has now been under way for many months between the giant interests which control the Dominion Coal Co. and the Dominion Steel and Iron Co. has been most spectacular. Big men have been in control of both industrial forces and the stakes were large. Hitherto all that had come to the surface besides much jockeying for position was the legal conflict which has been carried from court to court till nothing now remains but the final court of appeal in England.

The present negotiations, which for days were carried on in Toronto and then were shifted suddenly to New York, give great promise of having some result. Not that anything in the way of an adjustment has yet been arrived at, but pressure seems to have been brought to bear to make a settlement necessary. As a matter of fact, the companies have been spending a good deal of money in the conflict. The public know this and they also know that the Steel Company has been drawing liberal bounties for years. Putting two and two together they have begun to figure that perhaps they are the ones who are paying the piper.

It would be an uncomfortable thing if the bounty were removed. Hence, even to win may prove disastrous to the Steel Sompany, if victory brings with it a change of Government policy. So the big men have come together, and somewhat hopeful statements have been handed out from time to time.

The question is of national importance. The companies interested represent great industries, upon which the welfare of very many people depend. So much is this the case that all Canada is keeping its eye on the outcome, and popular opinion may settle what it sometimes takes law courts a long time to decide.

WOULD SAVE THE WOOLLEN INDUSTRY.

THE woollen industry has an aggressive advocate in the person of James P. Murray, of the Toronto Carpet Company. As chairman of the woollen section of the Canadian Manufacturers Association this year, it fell to him to initiate some action towards mending the unfavorable conditions which have long been affecting this class of manufacture. He is not wont to be found wanting when work is to be done. One result of his efforts was the gathering of woollen manufacturers in Montreal during the past month. It was a representative meeting, and one which bids fair to have a marked influence on the whole situation.

Mr. Murray is thoroughly conversant with the subject which he has taken in hand. His association with the Toronto Carpet Company has brought him into close and active touch with the industry in all its forms. He has for years made a close study of the elements entering into the manufacture, both here and in other countries. Hence his statement that the Canadian woollen industry needs more protection can always be supported by him with facts and figures.

It is worthy of note that the manufacturers feel more hopeful as a result of their interview with the Government than they have for years. The ministers appear to have seen a new light on the subject. If these hopes be realized, we may yet see a flourishing industry where now we find mills closed or struggling along in an up-hill fight. When this time comes Mr. Murray's efforts will be consummated.

AN EXPERT CHEMIST.

Mr. S. B. Chadsey, B.A.Sc., who for several years past has been chief chemist for the International Harvester Co., Hamilton, has joined the staff of Canadian Laboratories, Ltd., Melinda St., Toronto. Mr. Chadsey has had a wide experience in the chemistry of industry. He is a graduate of the University of Toronto, both in chemistry and practical science, and his work with the International Harvester Co. has brought him into close touch with the practical phases of his subject. He will specialize on all classes of testing in future.

NEWS LETTER

Vancouver, B.C., April 20th, 1908.

To the Editor of Industrial Canada :—

Dear Sir :—In view of the early starting by the Grank Trunk Pacific of railway work at Prince Rupert, the subject of the amendment of the Canadian Coast Regulations is exciting considerable interest in the minds of British Columbia manufacturers and shippers alike. The Vancouver Board of Trade is moving actively in the matter, and has addressed the following petition to the Dominion Government in regard to same :

"Whereas in the Dominion Statutes, Chapter (7) 2, Edward VII. of May 15th, 1902, intituled 'An act respecting the Coasting Trade of Canada,' and in Clause 3 thereof, it is provided that 'No goods or passengers shall be carried by water from one port in Canada to another except in British ships' ;

"Whereas, it has been ruled by the Commissioner of Customs, in his letter to this Board of Trade (No. 33,699, of December 3rd, '07), that the foregoing clause does not prohibit the carrying by water of such Canadian goods in transit from one port in Canada to another by a foreign vessel from a foreign to a Canadian port should they be routed through a foreign country ;

"Whereas, in corresponding United States Act of February 17th, 1898, it is provided as follows : 'Be it resolved by the Senate and House of Representatives of the United States of America in Congress assembled, that no merchandise shall be transported by water under penalty of forfeiture thereof from one port of the United States to another port of the United States, either directly or via a foreign port, or for any part of the voyage, in any other vessel than a vessel of the United States' ;

"Whereas, the discrepancy in these acts results most unfavorably for the owners of British vessels, and

"Whereas, in the opinion of this Board the inter-Canadian carriage of goods by water should be preserved for British vessels :

"Be it resolved, that the Dominion Government be and is hereby strongly petitioned to amend Clause 3, Chapter 7, 2 Edward VII., 1902, so as to provide that no goods shall be carried by water from one port or place of Canada to another port or place of Canada, either directly or via a foreign port, or for any part of the voyage, except in British ships."

It will be seen that under the present regulations the owners of British vessels are at a great disadvantage, and it is for the purpose of placing them on a more equal footing with United States vessels, and also for the upbuilding of our coast-carrying trade that the amendment is sought.

The proposed amendment does not seek to prevent a shipper, say, in Eastern Canada, routing his goods via a United States port if he so desired, but it would make it necessary, should the goods be consigned to a Canadian port, that same must be carried by British ships to their destination.

The granting of the petition by the Government would be the means of building up a large coasting trade, as for the next few years all goods destined for Prince Rupert will have to be water borne, and it is the feeling that the inter-Canadian carriage of goods by water should be preserved for British vessels.

The decision of the Customs Department to impose the "dumping duty" on tin plate has been strenuously opposed by the British Columbia salmon canners, and a request made by them to the department that the enforcement of the "dumping clause" be delayed until after 31st December of this year.

The canners have already purchased the tin plate necessary for this season's pack, and have also made sales based upon prices partially governed by the cost of tin plate, and as the same is now en route from England and cannot arrive until next June, the enforcement of the "dump" on 1st May will work a serious loss. It is understood that the department claims it has no power to defer action, on the ground that as soon as a manufactory was established, the act provides that a "dumping duty" should be enforced, and it is thus automatic in operation.

Further representations will no doubt be made by the canners, as the subject is too serious to be allowed to drop.

Wholesale condemnation is heard on all sides on the announced intention of the Department of the Interior to enforce Clause 12 of the Dominion Timber Regulations at the present critical state of the lumber industry. In view of the facts that large stocks of lumber are piled in the yards of the manufacturers throughout British Columbia, for which there is at present no sale, that logs are a glut on the market, so much so that the Provincial Government saw fit to suspend for a time the enactment prohibiting the export of logs, in order to aid the lumbermen financially and to save a large portion of the logs now in the salt water from destruction by the teredo, that ninety per cent. of mills in the interior of British Columbia have been closed for the past six months, that at least seventy-five per cent. of the British Columbia coast mills have also been closed for the past five months, that practically all logging is suspended,—in view of these facts, it is considered a great hardship that holders of Dominion licenses should be compelled to log their limits at the present time, and forced to dispose of their products at unremunerative prices. As has been remarked by a recent writer on the subject, the idea of forcing the cutting of the forests is in these later days somewhat unique. The whole tendency of timber legislation in almost every civilized country is to conserve rather than to hasten the utilization of their timber resources, so much so that it seems like stepping backwards thirty or forty years to be combatting the contrary policy. In the United States there is a movement in fully three-fourths of the lumber producing states to secure legislation that will favor forest conservation. There are laws on the statute books of at least a dozen states, the object of which is to encourage timbermen to hold rather than cut their timber. These states have in view the prosperity of their citizens twenty, thirty and fifty years hence, and it is hoped that the Dominion authorities may be induced to take the broader and more statesmanlike view.

Petitions, praying that the enforcement of the regulation may be delayed until the market conditions warrant are being circulated and extensively signed.

Yours very truly,

A. H. H. ALEXANDER.

Quebec, April 24, 1908.

To the Editor of Industrial Canada—

Sir:—The principal event which has happened in our city lately, and which has interested the local manufacturers particularly, has been the series of lectures given to the public under the auspices of Laval University by some of our most prominent local manufacturers. Upon the suggestion of Mgr. Mathieu, C.M.G., Rector of the University, we have had this advantage for the last few weeks. You can imagine that with the prestige of the University, these lectures delivered by industrial leaders were very highly appreciated, not only by business men, but also by the best class of our professional and educational men.

The lectures were given on different trades and industries, the one with which the lecturer was particularly connected. One evening Honorable Mr. N. Garneau, President and General Manager of the Chicoutimi Pulp Co., made his audience familiar with all the interesting details of the pulp industry, and concluded by expressing his opinion that undoubtedly the administrators of the public domain would soon have to open their eyes to the necessity of assuring more protection to our extensive but not inexhaustible timber limits. Then in the following week, Mr. V. E. Beauvais, local Manager of the Ogilvy Milling Co., developed the very attractive subject of the history of the flour milling industry in the world, and particularly in Canada. He was followed by another active member of our Association, Mr. Jos. Pickard, of the Rock City Tobacco Co., who, after speaking on Canadian tobacco and the development of the industry in Canada, left his audience altogether in sympathy with the practical conclusion he had reached, that is: to use nothing else than what is grown and is made in Canada, when it is so easy to secure as good if not better articles than the imported ones.

These lectures, well attended as they have been, can only make all classes of our population more familiar with the importance of industry in Canada, and, under the auspices of Laval University, they will certainly help the cause of technical and high commercial education as well.

We are informed that many other manufacturers have accepted the kind invitation of Mgr. Mathieu, and will soon place before the general public the results of their experience on some other interesting subjects connected with the business and industrial world.

In the Legislature a bill was introduced by Dr. Lacombe, the opposition to which was so strong that it was killed in Committee. Its object was to do away with the pay-on-instalment principle. By it, when goods were repossessed because of irregularity in meeting payments, three-quarters of the amount already paid must be returned to the person giving up the article. The bill got practically no support.

The Government have decided to keep an Agent-General for the Province of Quebec resident in Great Britain. It is felt that the special advantages of Quebec as a home for settlers and as a place for investment have not been placed before the people of Great Britain with sufficient force. The new official will receive a salary of six thousand dollars and a maximum allowance for expenses of five thousand dollars per year.

The Government grant to the Polytechnic School in Montreal has been increased from $3,000 to $5,000.

The opening of navigation makes business in Quebec take on an air of activity and life. Yours truly,

L. A. MOISAN.

Halifax, April 25, 1908.

The varied resources of the Maritime Provinces make them less susceptible to trade depression than any other part of the country. So in the period of short money and relaxed activity in the United States and elsewhere, the provinces by the sea have maintained a steady trade, and have enjoyed consistent prosperity. At the present time manufacturers are well supplied with orders. The field of their operations have extended, too, so that the products of the Maritime Provinces are known right to the Pacific coast.

The Silliker Car Works Co., Ltd., of Halifax, have already expended over $180,000 on their new plant, and have now drawn $65,000 of the bonus granted by the city. When this goes into construction, Halifax will have an industry of great value to itself and to the province at large. It is expected that by May 1st work will commence on cars.

The Halifax Glass Works is a new industry which is being organized by Capt. Watts. It is the intention of the company to manufacture bottles of all kinds, gem jars, lamp shades, etc. A site is under consideration near the Silliker works.

In a recent interview, C. M. Crockett, secretary of the I. Matheson Co., New Glasgow, spoke of the activity in their shops. He commented, however, on a noticeable effort among people at large to curtail expenditure. This was the only reason for quietness among store-keepers. As a matter of fact, all workmen were busily employed, and the shops had orders in advance.

Such is the story of the Maritime Provinces.

WILL PAY ACCORDING TO MERIT.

"As one official remarked, the company is paying both competent and incompetent men the same wage. It declined to do this any longer, and would henceforth pay according to an employee's worth." This is a striking statement on the labor problem. It is part of a newspaper item announcing that on May 1 the C. P. R. will allow all contracts with unions to lapse, and will in future run an "open shop." This is to obtain in all the shops on their system.

The decision of the C. P. R. should be of exceptional interest to workmen in every line of employment, and if they are wise they will not at once assume an attitude of truculent defiance without considering the reasons for the change. The unions have been enjoying the system which they themselves advocate. Workmen in general will recognize that the system of labor, the method of production, must be satisfactory to the employer, or he won't manufacture. Therefore, there is much solid food for reflection in the decision of the C. P. R. that the system advocated by the unions is not, after a fair trial, satisfactory.

One does not have to search long to see the reason. The official put his finger on one fundamentally weak spot, the minimum wage and the foisting of incapables on a foreman. The minimum wage, or union scale, is preposterous so long as the union does not insist on any adequate standard of efficiency in its members. Had the unions been led by wiser heads, they would have seen themselves that this element would in time be subversive to their scheme of closed shops. A principle which is based on an unfairness can never hold for very long.

The open shop is not inimical to the welfare of the efficient worker. On the contrary, it gives all men equal opportunities, and divides the rewards according to the work actually done.

WESTERN TRADE REPRESENTATIVES.

A Canadian traveller, who has charge as sales manager for one of the largest firms in Ontario, and who is going to locate in the West, would like to get in touch with some manufacturers who do not send travellers out west of Winnipeg, or would like to have him call on their clients or prospective customers.

The idea is to represent several firms and in that way reduce the cost of selling. He would appreciate the privilege of a personal interview, so as to be able to discuss terms, references, etc. His address may be procured through the Secretary, Toronto.

DEATH OF MR. CASSIDEY.

Mr. J. J. Cassidey, for many years prior to 1900 Secretary of the Canadian Manufacturers' Association, died in Toronto during the past month. Mr. Cassidey reached the advanced age of seventy-five. He was widely known among the manufacturers of Canada.

AMONG THE INDUSTRIES

Lethbridge, Alta., will build a new fire hall, at a cost of $25,000.

The Borden Condensed Milk Co. may build a large plant at Tillsonburg, Ont.

Portage la Prairie will install an auxiliary water system, at a cost of $50,000.

The Marvel Street Lighting and Novelty Co. will erect a factory in Montreal.

The Canadian Axminster Co. will increase their capital from $50,000 to $75,000.

A new theatre will be erected in Brantford this summer. Manager Johnson is in charge.

The City of St. Thomas, Ont., will erect three bridges this summer, at a cost of $24,000.

W. J. Mable, Victoria, B.C., will erect a carriage factory in that city during the present summer.

The Maple Leaf Milling Co. are contemplating the erection of a mill in the vicinity of Welland.

The Ogilvie Flour Mills Co., Ltd., have increased their capital stock from $3,250,000 to $4,500,000.

The name of the Union Brass Goods Co., Ltd., has been changed to Brass and Steel Goods, Limited.

The Brown, Boggs Company, Limited, Hamilton, will increase their capital from $50,000 to $150,000.

C. P. Walker, of the Walker Theatre, Winnipeg, will erect a new hotel in that city, at a cost of $140,000.

The Illinois Car Wheel Works are considering the establishment of a Canadian branch at Sydney, C.B.

The Ontario Bridge and Pipe Co. of Yale, Mich., will establish their Canadian branch at London, Ont.

Calgary is considering an increase in its water works system which would double its present capacity.

W. E. Sandford Manufacturing Co., of Hamilton, have increased their capital from $300,000 to $1,000,000.

The British Consolidated Mills, of London, Eng., may erect a string of forty elevators in the Canadian West.

A $25,000 mill and elevator will be erected by a Duck Lake, Sask., company, of which A. Baynton is secretary.

The School Board of Winnipeg will spend $600,000 in new buildings. Work will be put in hand as soon as possible.

The Canadian Northern will build a depot at Brandon, at a cost of $50,000. It is intended to do the work at once.

The name of the Pre-Payment Electric Meter Company has been changed to the Peterborough Meter Co., Limited.

The Manitoba Rolling Mills, Winnipeg, have re-opened, after being closed temporarily for repairs and extensions.

Toronto will vote on a by-law to spend $700,000 on a sea-wall, extending from the Western gap to the Humber river.

The basket factory of W. T. Glover, at Burlington, Ont., was destroyed by fire recently. The loss is estimated at $7,500.

St. Jerome's College, Berlin, will install two 60 h.p. tubular boilers, a 30 h.p. steam engine and a 300 light electric dynamo.

The name of the Featherbone Novelry Manufacturing Co., of Toronto, has been changed to the A. T. Reid Company, Limited.

Edmonton is considering tenders for the installation of an electric light system, to be operated by producer gas engines.

The City of Winnipeg will spend approximately $250,000 this year on the erection of new hospital buildings and their equipment.

M. F. Beach, of Iroquois, Ont., has purchased the factory and plant of the Cornwall Furniture Co., Limited. He will put it in operation at once.

Griffin & Company are building a meat packing plant in Edmonton, Alta. It will be equipped throughout with electricity for light and power.

The C. P. R. have under way the replacing of all their wooden bridges with steel structures. This will be carried out throughout their system.

The Manchester Cereal Mill, of Ingersoll, Ont., was destroyed by fire recently. The loss will amount to $26,000, with about $15,000 insurance.

The Superior Portland Cement Co. of Orangeville have resumed operations and will run night and day from now till next January, with a staff of 50 men.

The Bank of Nova Scotia will erect a building in Winnipeg at a cost of $250,000. Thomas Kelly & Sons have the contract. Darling & Pearson are the architects.

Cuthberson & Joseph, Victoria, are considering the establishment of a large planing mill this summer. The mill will be of a capacity of 100,000 shingles per day.

The sawmill of Sumner & Co., located at St. Peter's, N.B., was destroyed by fire recently, entailing a loss of $40,000, three-quarters of which was covered by insurance.

Geo. A. Archibald & Co., Kenora, Ont., have secured the contract to rebuild the mills of The Maple Leaf Milling Co. at Kenora, which were destroyed by fire some months ago.

A company to manufacture cement bricks by the Pierce method is said to be being organized in Hamilton. H. H. James and J. McLean are mentioned as being interested in it.

The City of Calgary is offering for sale the franchise to build and operate a street railway system in that city.

The Winnipeg Theatre Co. will erect a $150,000 building this summer. The interior fittings will be complete and expensive.

It is reported that the Royal Distillery Company of Hamilton will spend $500,000 on a new five-storey building and equipment.

A new hospital will be erected this summer at Regina, Sask., to cost $100,000. Debentures to cover the cost have already been sold.

A new Presbyterian church will be built in Hamilton this summer, at a cost of $46,000. Walter Stewart, Hamilton, is the architect in charge.

The Sovereign Metal Ware Co., Ltd., has been incorporated, with a capital stock of $1,500, to manufacture metal ware, novelties and household utensils.

The Quatsino Power and Pulp Co. of Quatsino, B.C., have completed plans for the construction of a large pulp mill. It is intended to commence work at once.

The Grand Trunk Pacific have given the contract for a 2,000,000 bushel elevator to be built at Fort William. It will cost $3,000,000, and will be finished by 1909.

The C.P.R. are planning extensive improvements at Grand Forks, B.C., including a round-house to cost $70,000, a station, and office building, at $49,000, and yard extensions at $40,000.

The C. P. R. will spend $2,000,000 on new buildings in Montreal. J. S. Paynter, of Montreal, has prepared the plans for the new structures, which will be built on Frontenac St.

The plant of the Northern Industrial Co. has been taken over by the Standard Mills, Limited, who will carry on the business of lumber and flour millers. Montreal is the head office.

The Gibb Evaporator Co. will get a free site for their factory from Exeter, Ont. The Connor Machine Co. will get a free site and exemption from taxation from the same municipality.

A reinforced concrete bridge will be built by the City of Brandon across the Assiniboine river. The city engineer, W. H. Shillinglaw, will be in charge of the work. The estimated cost is $60,000.

The Standard Mackintosh Company, Ltd., will operate in London, Ont., with $40,000 capital, and will manufacture men's and women's clothing and dry goods. J. C. Butler, of London, is a director.

The Niagara Paper Box Co., Ltd., which has just been incorporated, will carry on the line of manufacturing suggested by its title. Its capital is $20,000. W. L. Doran, Niagara Falls, is a director.

The Building Stone and Brick Manufacturing Co., Ltd., has been incorporated, to manufacture cement, stone and brick. The capital is $60,000, and head office, Ottawa. The provisional directors are A. Tracy, W. Nicholson, R. A. Nesbitt and E. Viens.

A new library building will be built and equipped by Victoria College, Toronto. Sproatt and Rolph, architects, have prepared plans. The building will be of stone and will cost $75,000.

The Willis Piano Company, Limited, have been incorporated, with a capital stock of $100,000, for the manufacture of pianos. A. P. Willis, of Westmount, P.Q., is the organizer of the new company.

The Western Fireclay Products, Limited, a company capitalized at $600,000, have definitely decided to locate in Weyburn, Sask. They will engage in the manufacture of fireclay, tile, sewer-pipe and other kindred lines.

The Ever-Safe Horseshoe Co., Ltd., has been incorporated, with a capital of $100,000, to manufacture a patent horseshoe. The company will operate in Midland, Ont. F. W. Grant, Midland, is solicitor for the new company.

The Defiance Handle and Turning Co., Ltd., have been incorporated, with a capital of $40,000, to do a general woodworking business. The chief place of business is Holstein, Ont. A. G. Brebner is a director of the company.

The Queen City Motor and Dynamo Co., Ltd., has been incorporated in Ontario, with a capital of $40,000. The company will operate in Toronto. The provisional directors are Thos. Patterson, J. M. Fernley and H. J. Ingram.

The Arcade Printing Co. have been incorporated, with a capital of $40,000, to do printing, lithographing, binding, etc. H. E. Livingstone, W. D. Livingstone and Frederick Stokes are the directors. Toronto is the place of business.

The Foley and Gardner Manufacturing Co. have opened a Canadian branch factory in Toronto. They manufacture meat and band saw filing and jointing machines. They have been doing a considerable business in Canada for some time from their United States factory.

The Wright Piano Co., Ltd., has been incorporated, with a capital stock of $40,000. Strathroy is the headquarters, and the provisional directors are E. J. Wright, J. W. Cameron, H. E. Mihell, S. M. Smyth and W. P. Dyment, of that town.

Canada Glass Mantels and Tiles, Limited, have been incorporated, with a capital of $150,000, to manufacture and sell glass mantels, tiles, etc. Toronto is to be the chief place of business. C. W. Thompson, solicitor, Toronto, is organizing the company.

La Compagnie Artistique de Quebec, Limitee, have been incorporated, with a capital stock of $20,000, to deal in and manufacture paints, mirrors and decorated glass. The place of business is Quebec. J. P. Beland is a director of the new company.

The Special Machinery Manufacturing Co., Ltd., Montreal, have been incorporated to take over the business heretofore carried on under a similar name. It is intended to extend the plant and enlarge the operations generally. The capital stock is fixed at $49,000.

The Reeder Electrical and Manufacturing Co., Ltd., has been incorporated, with a capital of $60,000, to manufacture electric, gas and other heating and lighting fixtures and appliances; brass, iron and copper articles, etc. Toronto is the headquarters of the company and A. W. Reeder, R. Gowans, A. E. Bowen and E. H. Wilson are the directors.

A new armoury will be built at Durham, Ont., to cost $8,000.

Moose Jaw, Sask., will build a high school, at a cost of $100,000.

A new school building will be erected in Halifax, N.S., this summer.

Prince Albert, Sask., will spend $180,000 in new school buildings this summer.

Fairview, B.C., will have a new normal school, to cost $50,000 for building and equipment.

The new high school which will be erected by the Regina Board of Education will cost $120,000.

An auxiliary water system will be put in by the City of Portage la Prairie, at a cost of $50,000.

The International Portland Cement Co. of Hull, Que., are building a large new wing to their plant.

An $80,000 court house will be built at Brandon, Man., this summer. Plans are now being prepared.

The Provincial Government will erect a normal school at Victoria, B.C., at a cost of $80,000, this summer.

London will build a new isolation hospital, at a cost of $30,000, and a sanitarium, at a cost of $10,000, this summer.

Willis & Cosgrove, of Calgary, Alta., will erect a theatre in that city at a cost of $25,000. The work will be done this summer.

The Deloraine Engine and Machine Works are applying for certain concessions in the form of tax exemption from Deloraine, Man.

An offer of $50,000 by Andrew Carnegie towards the cost of a library in Calgary, Alta., makes it probable that a building will be erected this year.

The Ontario Legislature has granted Peterborough power to give certain assistance in the way of fixed tax assessment to the Wm. Hamilton Mfg. Co.

The National Manufacturing Co. are contemplating the establishment of a Western branch. Regina and Saskatoon are both mentioned as the site.

$140,000 will be spent this summer by the city of Edmonton in the extension of the present water system, and $40,500 for the new Decarie incinerator.

The Marine and General Engineering Company are negotiating for a site and will proceed at once with the erection of a plant. They will likely locate in Sydney, N.S.

It is reported that a company will establish a brewery in Hamilton at a cost of $250,000. H. Bollinger, Fulton Building, Pittsburg, has been instructed to prepare plans.

It is definitely stated that the Imperial Locomotive Works, Limited, will commence building operations this spring at Lachine, Que. Col. L. Edye, of the Trust & Loan Company of Canada, is authority for the statement that $2,250,000 will be expended on the plant alone.

The Boston Carriage Co. have secured premises in St. John, N.B., and will open a large carriage factory there on May 1st.

The Sunbeam Incandescent Lamp Co. are negotiating with the City of Toronto for the purchase of a site for a factory. They intend spending about $75,000 on buildings.

New York capitalists and G. W. Brinkerhoff, an expert paper maker, have been in Fort Frances, Ont., looking at the water power there, with a view to starting a large paper mill.

It is reported that a four-story office building, the ground floor of which will be ocupied by the Dominion Bank, will be erected on the corner of King and McNab Streets, Hamilton.

The newly formed National Rolling Mills, Halifax, are contemplating the establishment of a plant at Sydney, N.S. Construction would be commenced at once. C. V. Wetmore is interested.

The Standard Implement Co. will build a big plant at Port Stanley, Ont. They have purchased thirteen acres of land beside the Pere Marquette tracks. J. B. Donald is president of the company.

The Red Cliff, Alta., Brick Works are now in operation and will produce 40,000 bricks a day. It is expected that the output will be doubled inside a month. Provision has been made for the larger amount.

Two bridges will be built over the Don in Toronto if the by-laws to be submitted to the people carry. The two will cost over $550,000. Contracts will be let as soon as possible after the passing of the by-laws.

The Blackwell Varnish Works Company proposes to erect a brick factory, 40 feet by 100 feet, on Wallace Avenue, Toronto. About twenty hands will be employed. It is said that the plant itself will cost about $40,000.

The Illinois Solid Forge Car Company are negotiating with the Council, with a view to the location of a plant in Sydney, N.S., and the offer of a free site and exemption from taxes for ten years has already been made.

Construction on the big Swift packing plant, four miles north of Edmonton, will be commenced at once. Work on the plant ceased when winter set in and the news of the resumption of operations has met with great favor.

The Garry, Brock Co. have undertaken to erect a $30,000 malleable iron plant and to employ 40 men in Pembroke, Ont., if the town will furnish a site and give a low assessment for 20 years. It is probable that the offer will be accepted.

The Standard Car Company, Durham, Pa., capitalized at $1,500,000, are negotiating with the City Council of Sydney, N.S., with a view to establishing a Canadian branch there; estimated cost of plant, $400,000. J. R. Shirley, of Charlottetown, P.E.I., is president.

Egerton Proctor, M. M. Stone and Thos. Moore, of Sandusky, Mich., propose establishing a factory in Stratford, Ont., to manufacture corrugated iron sewer pipe. They have secured a temporary building and will erect a factory during the coming summer. Operations will be begun very shortly.

Trade Enquiries

NOTE.—For further information regarding any inquiry mentioned under this heading or the names of inquiries, apply by numbers to the Secretary, at Toronto.

565 **Agent.**—A **Birmingham** firm wishes to hear from a **Canadian** manufacturer of agricultural implements open to appoint an agent.

566 **Agency.**—A **Scottish** firm, claiming to have an old-established connection among wholesale grocers and provision dealers throughout Scotland, desires to obtain the agency of some first-class Canadian canned apple exporters. A member of the firm is visiting the Dominion in June, and would be pleased to call on interested parties.

567 **Agency.**—A **London** correspondent, possessing a connection among buyers, wishes to secure tne representation of Canadian manufacturers of printing and general papers.

568 **Agency.**—A **Cape Town** firm of wholesale general merchants desire to communicate with Canadian manufacturers of paper, with a view to an agency for the sale of all kinds of paper goods in South Africa.

569 **Agency.**—A **London** firm desires to secure the agency of reliable Canadian packers of canned salmon and lobster.

570 **Agency.**—A **London** firm of general merchants is desirous of securing the agency of Canadian exporters of the following: Grain, evaporated apples, tallows, greases, paraffin wax, minerals, nickel and copper matte, mica, phosphates, canned goods, etc.

571 **Agency.**—A firm of manufacturers' agents in the **North of England** are open to handle an original quick-selling specialty of Canadian manufacture.

572 **Asbestos.**—A firm of felt manufacturers in **Yorkshire** is desirous of getting into touch with producers of asbestos in Canada.

573 **Asbestos.**—Inquiry has been made by a **Lancashire firm** for the names of Canadian exporters of asbestos to the United Kingdom.

574 **Agency for canned goods.**—An old-established **Leeds** firm of import merchants, with ample storage accommodation, are desirous of communicating with a firm in Canada anxious to open up trade of any kind of canned goods.

575 **Agency for manganese ore.**—A firm in the **North of England** is open to take up the agency for a Canadian firm exporting Canadian ore.

576 **Agency for graphite.**—An importing and distributing firm in the **Port of Hull (England)** desire to get into communication with Canadian exporters of coiled wood hoops, which should measure from four up to fifteen feet.

577 **Agency for specialty.**—A Hull firm of commission merchants are desirous of handling some good-selling line of Canadian manufacture, preferably a household specialty.

578 **Agency.**—A **London** firm desires to obtain the agency of Canadian exporters of copper and nickel matte, copper phosphates, mica, and other minerals; greases, tallow, paraffin wax, etc.; grain, beans, peas, and general produce.

579 **Ash Handles.**—A **Manchester** firm asks for prices and dimensions of ash handles for hay forks and hay rakes from Canadian manufacturers.

580 **Bags for Sugar.**—A **Barbados** firm, handling jute sugar bags, 45 x 26 inches, and weighing 1¾ lbs., desires to find a Canadian manufacturer of similar bags for sugar.

581 **Barrel Staves.**—A firm of import merchants in the port of **Hull** are open to hear what prices Canadian firms can offer for shipments of cask staves for cement barrels.

582 **Box Shooks.**—A **Manchester** firm asks for sizes and c.i.f. prices of box shooks from Canadian manufacturers.

583 **Box Shooks.**—A **Lancashire** firm, now buying in the United States, asks for sizes and c.i.f. prices of box shooks from Canadian manufacturers.

584 **Broom Handles.**—A **Manchester** firm asks for prices of broom handles from Canadian manufacturers.

585 **Broom Handles.**—A **London** firm can supply polished broom handles to Canadian buyers.

586 **Bungs.**—A **Manchester** firm asks for samples and prices of compressed and other bungs from Canadian manufacturers.

587 **Boots and Shoes.**—A firm in Barbados handling boots and shoes desires catalogues and prices from Canadian manufacturers.

588 **Canned Fruit.**—An old established produce firm desires to undertake the sole buying or selling agency in the **North of England** for canned apples and other canned fruit.

589 **Canned Lobster, Provisions, Fish.**—An Egyptian firm desires to represent Canadian exporters of canned lobster, provisions, fish, etc. Can supply first-class reference.

590 **Canned Apples.**—A well-connected produce broker, established in **Leeds** and **Hull**, would like to hear from a Canadian canning company, supplying apples in one-gallon tins, who are not represented in England. Shipments could be arranged c.i.f.

591 **Carbide of Calcium.**—The largest importer of carbide of calcium in **Australia** is desirous of obtaining quotations upon a c.i.f., etc., Melbourne and Sydney, basis, for carload quantities of carbide packed in iron drums, enclosed in crates, of medium lump down to electrolite sizes. Quotations should be at least for parcels of not less than 15 tons in one shipment.

593 **Canoes, Collapsible Furniture, Hardware, etc.**—Well-known manufacturers' agent and importer in **Hamburg, Germany,** would be glad to receive catalogues and prices from Canadian manufacturers of the above lines who could ship to the West African coast.

594 **Canned Apples.**—**Englishman,** shortly visiting Canada, is anxious to call on exporters of these goods who could do business with him. Canadian references. Firms interested should write this office.

595 **Chair Seats.**—One of the largest **Australian** importers of chair seats is anxious to obtain samples and quotations for carload quantities of seats, upon the basis of f.o.b. steamer, New York. The usual United States specifications are required. This offers an exceptional opportunity for Canadian makers of chair seats to secure a first-class Australian connection.

596 **Cereals.**—A **London** firm wishes to handle Canadian cereals.

597 **Clothes Pegs.**—A **Manchester** firm asks for c.i.f. prices of clothes pegs from Canadian manufacturers.

598 **Condensed Milk.**—An Amsterdam firm would like to get in touch with Canadian handlers of condensed milk.

599 **Copper Ore.**—A **Manchester** firm asks for prices, c.i.f. Liverpool, of copper ore from Canadian exporters.

600 **Confectionery and Picture-frame Moulding.**—A **Barbados** firm, handling confectionery and picture-frame moulding, desires to correspond with a Canadian firm manufacturing these articles.

601 **Cider.**—A well-known firm of cider merchants in the **North of England** are prepared to consider prices and samples of Canadian cider, and desire to hear from manufacturers, with suggestions as to business terms, preferably cash on delivery.

602 **Coiled Wood Hoops.**—A firm of import and distributing merchants in the **North of England** desire to get into communication with Canadian exporters of coiled wood hoops, which should measure from four up to fifteen feet.

603 **Crank Shafts and Valves for Gasoline Engines.**—Western Canada firm inquires for makers in Canada of these goods.

604 **Cupolas, Foundry Equipment, Conveyors.**—An inquiry has been received from an Ontario firm manufacturing bedsteads for the above goods. Will purchase for cash.

605 **Dextrine.**—A Manchester firm wishes to correspond with Canadian manufacturers of dextrine.

606 **Flour.**—A broker and commission merchant and millers' agent, of St. John's, N.F., wishes to obtain the agency of a Canadian flour mill.

607 **Flour, etc.**—A general importer and exporter of St. John's, N.F., wishes to be put in communication with Canadian firms dealing in the following articles: Flour, canned goods, fruits, vegetables, etc.; cattle feeds and hay, also oats and corn, horseshoes, soaps, syrups; also with Canadian buyers of the following articles: cod and seal oil, refined cod liver oil, dry codfish, and pickled fish, lobsters and salmon tinned.

608 **Farina.**—A Manchester firm asks for prices of farina from Canadian exporters.

609 **Furniture.**—A London firm of general merchants and importers wishes to hear from Canadian exporters of furniture (particularly bent-wood chairs) and timber.

610 **French Trade.**—Canadian exporters of various lines can have inquiries inserted in the monthly circular of the British Chamber of Commerce, Paris, France, by writing this office. This circular reaches 1,100 importers throughout France, and should prove an excellent means for advertising Canadian goods.

611 **Glues.**—A Manchester firm asks for prices and samples of glues, in cakes and powder, c.i.f. Liverpool or Manchester.

612 **Harris, Saddlery, Hardware, Photo Goods, Stationery, Sanitary Goods, Cycle Goods, etc.**—A well-known firm of manufacturers' agents covering all the Orient twice a year, are anxious to form connections with reliable exporters of the above and other lines which could be handled advantageously in that market. Have excellent references, experience and connection, second to none, and are prepared to push the goods of any firm which gives them their agency.

613 **Hammer Shafts.**—A Leeds firm dealing in hammer shafts of the large sizes, asks Canadian manufacturers to state their lowest prices for shipments to Liverpool. Terms, cash on delivery.

614 **Hides.**—A Leeds firm of hide and skin auctioneers wish to make arrangements with Canadian exporters for shipments of hides, to be sold on a commission of 2 1-2 per cent. Payment for goods sold made promptly every week, together with an annual bonus. Best references furnished.

615 **Hides and Skins.**—A North of England firm is desirous of hearing from exporters in Canada of hides and skins, with a view to receiving consignments.

616 **Leatherboard.**—A fancy box manufacturing firm asks for prices of leatherboard from Canadian manufacturers.

617 **Leatherboard and Whiteboard.**—A Liverpool firm requiring in the near future leatherboard and whiteboard for fancy box-making, wishes to obtain prices and samples of same from Canadian manufacturers.

618 **Lawn Mowers.**—A Manchester firm desires to obtain prices and catalogue of lawn mowers from Canadian manufacturers.

619 **Linseed Oil.**—A Manchester firm desires to obtain prices of linseed oil from Canadian exporters.

620 **Low-grade Flour.**—Inquiry has been made by a Hull, England, firm respecting the prospects of securing supplies of low-grade flour for animal feeding meals, which must be of the whitest color possible.

621 **Lumber.**—A South African firm of furniture dealers and manufacturers desire to communicate with Canadian manufacturers and exporters of hemlock lumber.

622 **Leather.**—A Leeds firm, largely interested in the import and export of all kinds of leather, inquires for Canadian ex-

Alberta Portland Cement Company Limited

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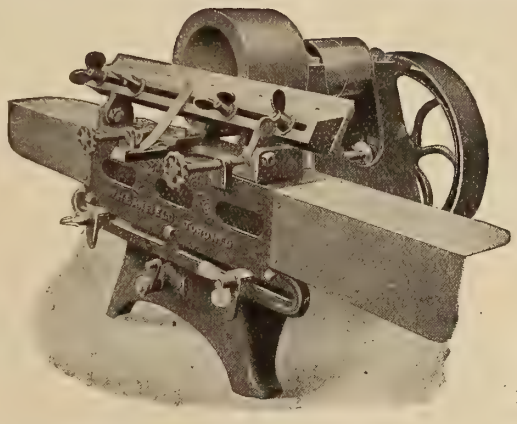
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porters of chrome glazed kid. Suggested terms: Cash on delivery, after examination.

623 **Lumber.**—A **Belgian** firm desires to be placed in touch with Canadian lumber firms able to supply pit props of fir wood, fully stripped of bark. (Length, 1 metre 60, lm, 80, 2ms. 2m. 20, 2m. 50 3ms. Circumference at the small end, 35 to 54 centimetres). They desire quotations, c.i.f., Calais or Dunkirk, or the Belgian ports.

624 **Lumber.**—A **Rhodesian** timber merchant desires to correspond with Canadian exporters of lumber. Catalogues and price list required.

625 **Lumber—Spruce, Pine and Cypress.**—A large lumber dealer in **San Juan, Porto Rico,** seeks connection with manufacturers only of rough and dressed lumber of the above kind, who can ship in cargo lots to the three ports of Porto Rico. Will purchase or sell on commission, paying cash or time. Good references.

626 **Manufacturers' Representative.**—A reliable manufacturers' agent in **Varsovie, Russia,** is open to represent Canadian firms interested in the Russian market. Will handle any lines and has excellent references.

627 **Manufacturers' Agent.**—Well-known **Montreal** business man is open to represent Canadian manufacturers of mechanical supplies, iron and steel tools and general hardware in Montreal and surrounding territory. Can give good Canadian references, long experience and can command some capital. This is a good opportunity for a firm to get a satisfactory representative.

628 **Manufacturers' Agent.**—**Halifax, N.S.,** manufacturers' agent of long experience and good references is open to represent Western manufacturers in the Eastern Provinces.

629 **Manufacturers' Agent.**—**Port of Spain, Trinidad,** agent is open to represent Canadian firms in that district.

630 **Maple Block Floorings, etc.**—Inquiry has been received from a **Lancashire** firm for the names of Canadian exporters of maple block floorings. They are also interested in mangle rollers and other timber goods.

631 **Marketable Commodities.**—An old established **Leeds** firm, with large storage accommodation and with travellers continuously covering the country, is open to handle some additional lines in produce, specialties and manufactured goods, and invites catalogues, samples and prices from Canadian firms interested.

632 **Maple-wood Blocks.**—Inquiry has been received from a firm in **Holland** for the names of Canadian exporters of maple-wood blocks.

633 **Machinery.**—A **South African** firm of wholesale importers and commission merchants desire to be placed in communication with Canadian manufacturers and exporters of machinery and requisites for the dairy trade.

634 **Machinery.**—A **South African** firm of wholesale importers and commission merchants would like to correspond with Canadian manufacturers and exporters of machinery and requisites for the bakery trade.

635 **Machinery.**—A **South African** firm of wholesale importers and commission merchants desires to be placed in touch with Canadian manufacturers and exporters of machinery and requisites for the meat trade.

636 **Metals.**—A **London** firm of metal refiners and merchants wishes to get into touch with Canadian firms who are prepared to ship scrap metals, such as old copper, brass, gunmetal, nickel, zinc, etc., to this country in considerable quantities.

637 **Mica.**—A **London** firm desires to get into touch with Canadian exporters of mica who may be seeking a market in the United Kingdom.

638 **Mica.**—A Glasgow firm, claiming to have an extensive connection with electrical engineers throughout the United

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Kingdom, desires to be placed in touch with Canadian firms in a position to export a good quality of mica.

639 **Mica.**—Inquiry has been received from a **London** firm for the names of producers of mica in Canada who may wish to export to the United Kingdom.

640 **Mica.**—A **London** firm wishes to handle Canadian cereals.

641 **Oak Planks.**—A timber firm in the **North of England** is open to receive lowest prices from Canadian manufacturers of waggon-oak planks and cabinet-oak planks, two inches thick and upwards.

642 **Oil Cakes.**—Inquiry has been received from a firm of merchants in the **North of England** for the names of Canadian manufacturers of oil cakes.

643 **Office Furniture, etc.**—A **Manchester** firm of cabinet-makers desires to get into communication with Canadian manufacturers and exporters of roll-top desks and general office furniture. They are also in a position to do trade in turned wood (chair legs, dowels, mouldings, etc.).

644 **Oak.**—A firm in **Rotterdam, Holland,** wishes to hear from Canadian shippers of oak.

645 **Paper Textiles.**—A **Bradford** firm wishes to get into communication with Canadian manufacturers of paper textiles and similar specialties, and will be pleased to receive samples, prices and other particulars.

646 **Provisions, Fruits, etc.**—A **West of England** firm desires to hear from Canadian exporters of butter, cheese, bacon, oatmeal, dried apples, canned meats, chemicals and oils, etc., who may wish to form connections on this side.

647 **Pianos.**—A firm of musical instrument importers in the **North of England** would like to have catalogues and prices from Canadian firms making pianos to English standards.

648 **Scrap Steel.**—A **Scottish** firm makes inquiry for the names of shippers of scrap steel and malleable iron in Canada.

649 **Slate Battens.**—A **Manchester** firm desires to obtain from Canadian manufacturers c.i.f. prices of slate battens. Sizes, 1 1-2 x 5-8 inches, 2 x 5-8 inches and 2 x 3-4 inches.

650 **Smokers' Requisites.**—A **Barbados** firm, selling cigars and cigarettes, would like to receive catalogues and prices from manufacturers and jobbers in Canada of pipes and smokers' requisites.

651 **Sole Leather.**—A well-connected firm of leather factors in the **North of England** are prepared to receive and accept responsibility for consignments of sole leather suitable for the English market, and invite correspondence from exporters interested.

652 **Specialties.**—A **London** merchant desires to be placed in touch with Canadian firms who are desirous of making shipments of their specialties to the English market.

653 **Small Saw-mills.**—The address of a gentleman who desires to purchase small saw-mills in **Sao Paulo, Brazil,** can be obtained at this office. Good references.

654 **Sulphate and Sulphite.**—The general manager of three paper mills in Australia is anxious to obtain samples and quotations for sulphate and sulphite, bleached and unbleached, pulp. The total quantity required is at present about 700 tons per annum. Quotations must be upon a c.i.f., etc., Melbourne basis.

655 **Tanning Extracts.**—A firm of factors in the **North of England,** having an old-established connection among leather manufacturers, wish to get into touch with Canadian manufacturers of tanning extracts.

656 **Tanning Extracts and Material.**—A **Leeds** firm of importers, possessing an established connection in the leather and tanning trades, invites correspondence from Canadian manufacturers of tanning material or extracts (such as hemlock extracts), or any specialties used in tanning. Prices to be based c.i.f., Hull or Liverpool.

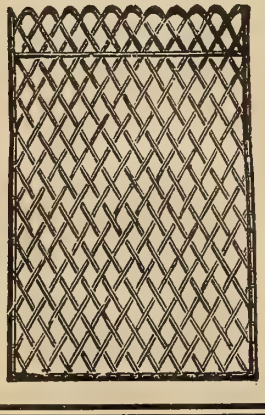
657 **Timber Pit Props.**—A **Belgian** firm desires to purchase mine

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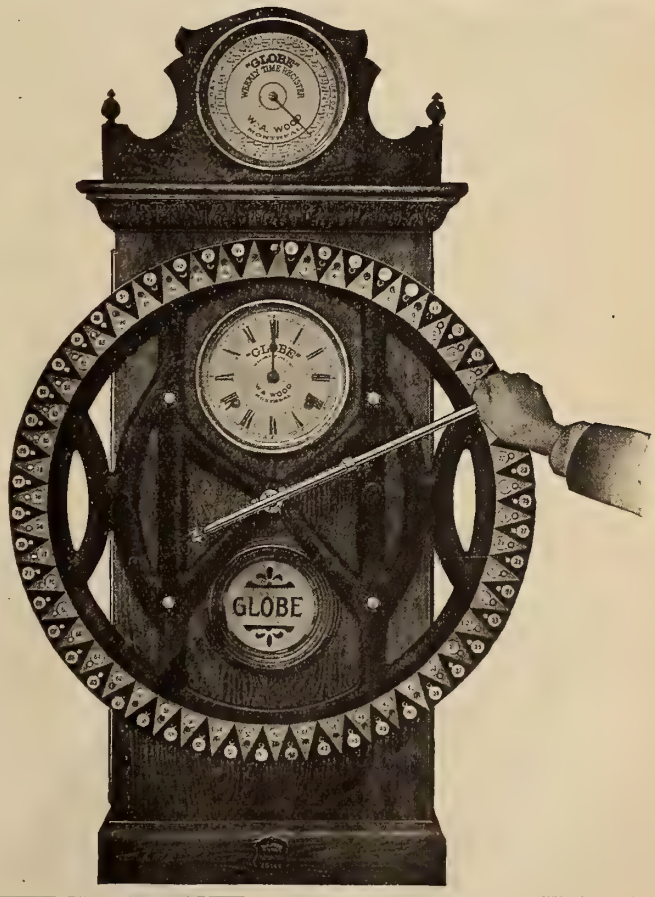
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timber or pit props, of the following dimensions: 1.60, 1.80, 2.00, 2.20, 2.50 and 3 metres; circumference at the thin end, 35 and 54 centimetres. They desire an offer c.i.f. at Calais, Dunkirk or any Belgian port.

658 **Tobacco.**—A **Barbados** firm dealing in tobacco desires to correspond with manufacturers of smoking tobacco in Canada.

659 **Toilet Soap and Confectionery.**—A **Barbados** firm of druggists wishes to receive catalogues and price lists from Canadian manufacturers of toilet soap and confectionery, with the view of placing orders.

660 **Timber Goods.**—A **London** firm of general merchants and importers desires to be placed in touch with Canadian exporters of timber goods (flooring, wood excelsior, wood handles, wood mantels, door sashes, turned wood, etc.).

661 **Trade.**—A **London** firm of merchants, with connections throughout the world, are desirous of developing import and export trade with the Dominion, and would like to open up correspondence with Canadian merchants, manufacturers and importers.

662 **Twines.**—A **Cape Town** firm of wholesale general merchants would like to be placed in communication with Canadian manufacturers of twines.

663 **Veneer Stock.**—A requisition for veneer stock, which is now supplied by some United States firms. It is for three-ply stock, mostly used by picture-frame makers, and in large quantities, mostly ash, on account of the very decided grain in this timber. They also use plain and quartered oak and a small quantity of fancy woods. The size of the panels mostly imported range from 22 x 26 inches up to 60 x 30 inches, but the bulk would be in the smaller size, whilst the thickness is either 3-16 inch or 1-4 inch, principally 3-16 inch.

664 **Vegetables in Brine.**—A **Liverpool** firm asks for samples and prices of vegetables in brine from Canadian exporters.

665 **Wood Pulp.**—An **Osaka, Japan,** firm of general importers and exporters are in the market to purchase all sorts of wood pulps for the paper industry of Canadian manufacturers. Want lowest quotations, c.i.f., Japan ports, with time of delivery and terms. This is a good opportunity.

SPECIALS.

Engineering Profession.—Young, well-educated Englishman, with thorough technical training and some years' practical experience at mechanical and electrical engineering, is anxious to come to Canada if he can find work in his profession. References.

Peruvian Electric Railway.—Full particulars of an opportunity for a good firm of railway contractors to obtain a profitable contract in Peru can be obtained at this office. The proposition is the electrification of a street railway system in the city of Arequipa, of 40,000 population. The Secretary would be glad to hear from any Canadian firms interested in this.

Glue Business.—A well-known English manufacturer of glue, with over 20 years' experience as the manager of large English works, making a high-grade quality of glue and gelatine, is anxious to find position as manager or superintendent of a good Canadian factory engaged in this business, or he would act as manager for a new concern if capital to the extent of $25,000 could be secured. Excellent references, and thorough knowledge of the business.

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Manufacturing premises for sale or lease. Buildings and real estate in the town of Goderich, lately occupied by the Goderich Engine & Bicycle Co., consisting of two acres of land in the centre of town, and upon which is erected substantial factory buildings. Any bona fide industry will meet with liberal treatment. For particulars, address F. W. Doty, Goderich.

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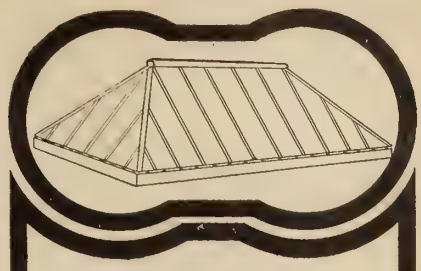
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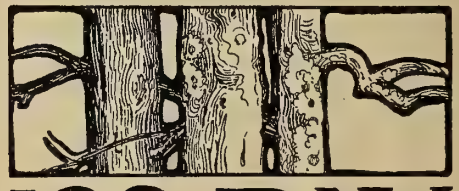
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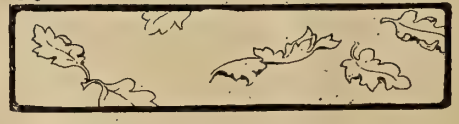
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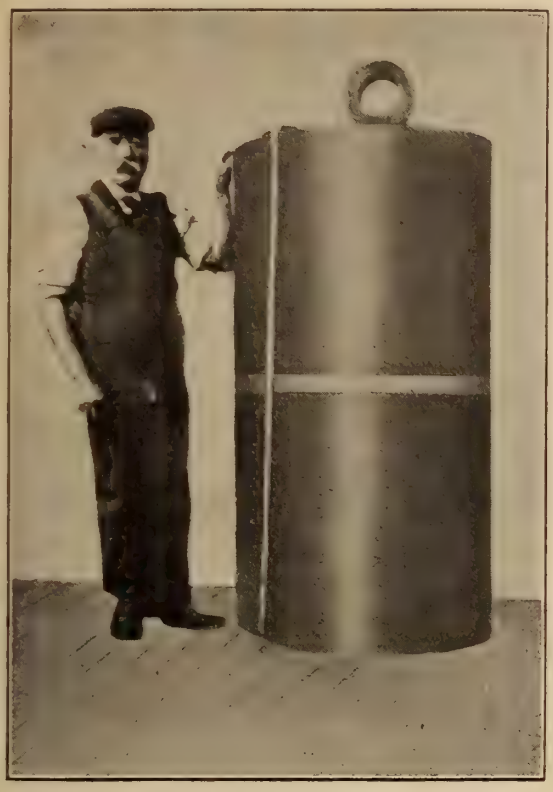


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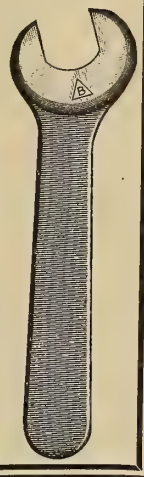
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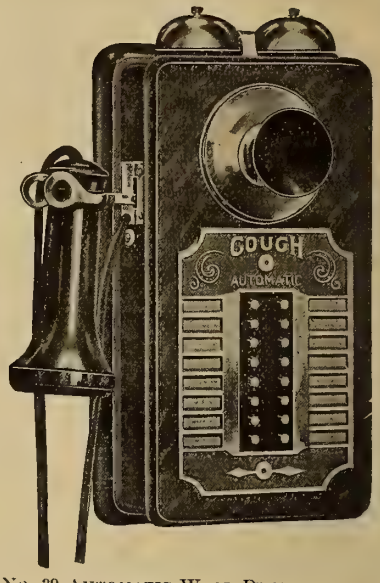
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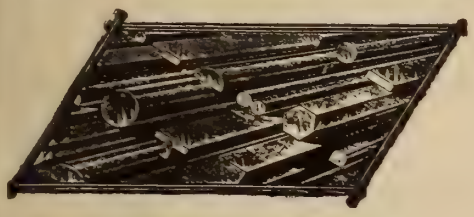
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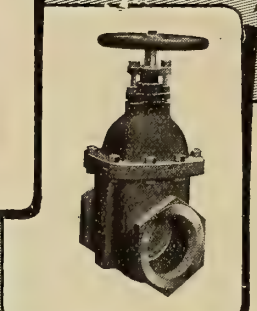
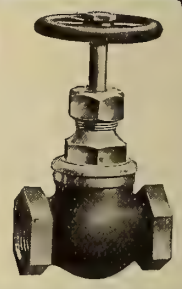
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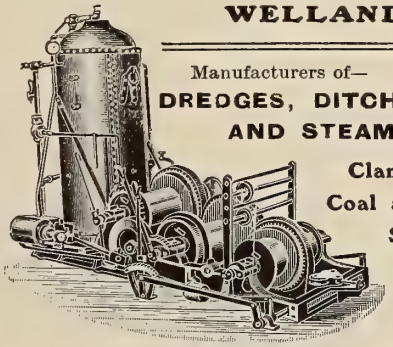
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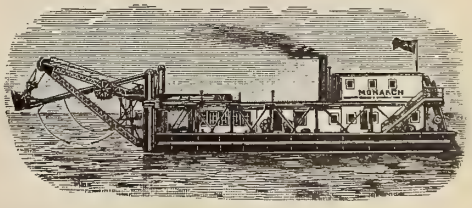


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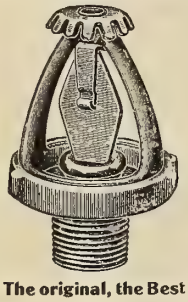
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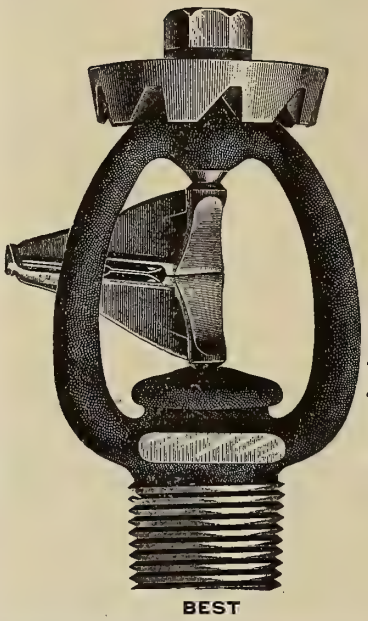
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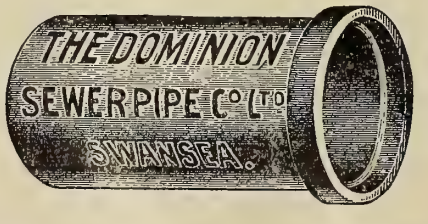
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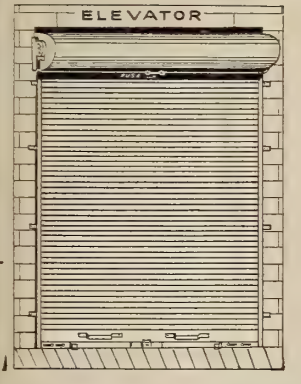
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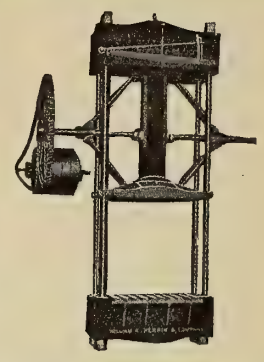
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EXECUTIVE COUNCIL

APRIL MEETING.

THE regular monthly meeting of the Executive Council was held in the Board of Trade, Toronto, on Thursday, April 16th, at 2 p.m.

In the absence of the President, who had telegraphed his regrets, the chair was occupied by Mr. Harry Cockshutt, of Brantford.

Among those present were : Messrs. Henry Bertram, Dundas ; Geo. Booth, Toronto ; P. H. Burton, Toronto ; H. Cockshutt, Brantford ; W. R. Dunn, Hamilton ; J. F. Ellis, Toronto ; P. W. Ellis, Toronto ; Atwell Fleming, Toronto ; H. W. Fleury, Aurora ; Jas. Goldie, Guelph ; Sam Harris, Toronto ; J. H. Housser, Toronto ; J. B. MacLean, Toronto ; C. R. McCullough, Hamilton ; R. McLaughlin, Oshawa ; W. K. McNaught, Toronto ; Robt. Munro, Montreal ; W. C. Phillips, Toronto ; A. S. Rogers, Toronto ; Alex. Saunders, Goderich ; Henry Stroud, Paris ; R. L. Torrance, Gueph ; C. H. Waterous, Brantford ; R. J. Whyte, Smith's Falls ; S. Morley Wickett, Toronto ; Dan Wilson, Collingwood ; W. H. Wyman, Montreal.

The minutes of the March meeting, as published in "Industrial Canada," were taken as read.

COMMUNICATIONS.

Communications were reported as follows :

(a) From members of the Council unable to be present,—J. D. Rolland, Arthur W. White, S. W. Ewing, Louis Simpson, R. J. Younge, Edward Gurney, Wm. Robins, W H. Rowley, J. M. Taylor, J. J. McGill, Ed. Freyseng, J. A. Coulter, and Wm. Smaill.

(b) From the Guelph Board of Trade inviting the Council to hold its June meeting in that city.

(c) From the Harbor Commissioners of Montreal, extending to the Association an invitation to be their guests some time during the convention in Montreal on a trip around the harbor.

These two communications were allowed to stand over, to be considered in connection with the report of the Reception and Membership Committee.

(d) From Mrs. Minnie Killam conveying to the Council her sincere thanks for the resolution of sympathy extended to her on the death of her husband, the late Judge Killam.

(e) From Mr. James McLauchlan, Owen Sound, requesting permission on behalf of himself and some thirteen others to organize a biscuit and confectionery section. By unanimous consent it was decided to grant the necessary authority.

(f) From the Vancouver Board of Trade urging the Association to support its representations regarding, first, the Canadian coasting laws ; second, the Alaska Yukon Exposition ; and third, a bounty on lead. It was decided to leave the first over to be considered in connection with the report of the Railway and Transportation Committee, and to refer the second and third to the Commercial Intelligence and Tariff Committees respectively.

(g) From the Toronto Branch calling attention to a suggestion which had been made by one of its members with regard to the investment of British capital in Canadian securities. It was pointed out in this letter that the existing facilities were entirely inedaquate to care for the expansion of Canadian enterprises, except at such high rates of interest as made borrowing unprofitable. While sympathy was expressed with the proposal, it was felt that the Association was scarcely in a position to take up a matter of this kind. The letter was accordingly ordered to be filed.

SECRETARY.

The secretary reported that, in company with the president, he expected to visit the members in New Brunswick and Nova Scotia during the month, holding meetings in Halifax and St. John.

TREASURER.

The treasurer, Mr. Geo. Booth, presented a statement of receipts and disbursements for the month, showing a balance on hand March 31st of $10,863.98. He stated that, in accordance with authority given him, he had invested $4,231.38 in city of Toronto debentures, at prices which would yield the Association 4½ per cent.

FINANCE.

In the absence of the vice-chairman, Mr. Tindall, the report of the Finance Committee was read by the secretary. It recommended for payment the accounts of the month totalling $1,631.42. It reported the receipt of a letter from the Furniture Section objecting to its ruling to the effect that the 10 per cent. of the revenue of the sections should be non-cumulative. In answer to this, it pointed out that it would be unsafe for the Association to operate on any other principle, though by reason of the special circumstances surrounding the work of the Furniture Section, any demand they might make for extra funds would always be considered on its merits.

It was recommended by the committee that a box be rented in the safety deposit vaults of one of the Trust Companies for keeping the Association's valuable papers, that the treasurer and secretary both be placed under bonds, and that a rearrangement of the office should be made to accommodate the new Tariff Department.

RAILWAY AND TRANSPORTATION.

The report of the Railway and Transportation Committee, as presented by the chairman, Mr. W. R. Dunn, read in part as follows :

The special committee appointed at the last meeting of the Executive Council to consider what steps should be taken to protect the Association's interests in the reorganization of the Board of Railway Commissioners for Canada, met on March 31st, 1908.

After careful consideration it was agreed that it would be entirely inconsistent with the principles laid down by the Association, to encourage any action which would savor of class legislation. It was pointed out that the Association had gone on record at the last annual convention urging upon the Government the reorganization of the Railway Commission. This resolution was duly filed with the Premier, the Right Honorable Sir Wilfrid Laurier, and the responsible Ministers of the Government. It was afterwards presented and endorsed in person to the Premier and the Minister of Railways and Canals by a delegation who waited upon the Government for that purpose. In the Association's representations the Government was asked to consider at an early date the reorganization of the Board, and incident thereto to give careful consideration to the business interests of the country.

In view of this, your committee recommends the adoption of the following resolution :—

"The Canadian Manufacturers' Association commend the action of the Government in appointing His Hon, Justice Mabee, to the Chairmanship of the Board of Railway Com-

missioners for Canada, and feel assured that the selection of the other members to the Board will receive the same careful consideration."

We again submit the resolution passed by this Association at the last convention, as setting forth fully our views in regard to the reorganization of the Board.

"Whereas, the Parliament of Canada have, during the last two years, enlarged the duties of the Board of Railway Commissioners for Canada much beyond those mentioned in the Railway Act of 1903 ; and

"Whereas, in our opinion, the duties devolving upon the present Commissioners have become so numerous and so diversified that it is impossible to render the service required in the interests of the public ; be it

"Resolved,—That the Canadian Manufacturers' Association, now in convention, place upon record its recognition of the valuable services which the Board of Railway Commissioners has been rendering in the public interest, and in order to provide for the continuance of this important work, respectfully suggests the advisability of increasing the membership and reorganizing the Board under a plan to be devised or approved by the Board, which would divide and specialize the work of the Commissioners."

We are utterly opposed to class legislation of any kind whatsoever, as we believe that such will result in impairing to some extent the good legislation already enacted. One of the important duties of the Railway Commission is to deal with traffic conditions. The manufacturing interests supply the largest percentage of the tonnage and freight earnings of the railways. The freight rate which applies to manufactured products may be considered the unit or base rate upon which rates on all other products are founded. The regulation of freight rates ranks equally with the tariff, as being of the utmost importance to Canadian manufacturers.

We submit that the public will be best served by the Government appointing to the Board men who will not be looked upon as representing any particular class or interest ; the requisite qualifications being a wide business experience, coupled with sound judgment and a broad spirit of equity, which may be depended upon to deal fairly with all interests."

The regular meeting of the Railway and Transportation Committee was held on Wednesday, April 8th.

Uniform Bill of Lading.

Our application to the Board of Railway Commissioners for a simple form of bill of lading has again been renewed. A circular has also been sent out to the Boards of Trade and Shippers' Associations setting forth our views, and asking for their endorsation. Replies received so far heartily endorse the action taken by the Association.

Reduction in Rates to Points in the North-West.

Your committee reported some time ago that the railways had re-issued their tariffs, class and commodity, reducing rates generally to the West, effective December 23rd, 1907. A further reduction has been made, principally on 6th class, applying on agricultural implements, machinery, iron work, household goods, vehicles, etc., effective March 10th, 1908, as follows :—

Regina	former	rate	$0 97	new	rate	$0 87
Moose Jaw	"	"	1 00	"	"	0 92
Medicine Hat	"	"	1 16	"	"	1 14
Calgary	"	"	1 24	"	"	1 16
Saskatoon	"	"	1 06	"	"	1 00
Edmonton	"	"	1 24	"	"	1 18

Renewal of Mixed Carload Arrangement in Connection With Agricultural Implements to the West.

In the re-issue of the commodity tariff from the East to Manitoba points, the railways did not renew the mixed carload arrangement in connection with agricultural implements. On calling their attention to this, a supplement to the tariff was issued at once, effective March 28th.

Freight Classification to Apply to International Traffic via the Detroit and St. Clair Frontiers.

As stated in our last report, the railways made application to the Railway Commission for permission to adopt the official classification carload minimum in connection with the international rate case. It was represented that this was essential to the success of the international rate plan in this case. The manager of the department protested against any change in the Canadian classification, which would bring about an increase in the minimum weights. In this connection your committee recommends the adoption of the following resolution :

"Whereas, the Railway Act provides that the Board of Railway Commissioners shall endeavor to have a classification uniform throughout Canada as far as may be, having due regard to all proper interests ;

"And whereas, this point was urged before the Board by the railway interests at the hearing in the international rate case, in support of their suggestion for the application of the Canadian classification instead of official U. S. classification on international traffic ;

"And whereas, the international rate case was adjusted by compromises by the shipping interests accepting the Canadian classification for international traffic, notwithstanding that the ratings are, generally speaking, higher than the official classification formerly prevailing ;

"Resolved, that this Association vigorously protests against the recent proposal of the railway interests to adopt a separate classification for international traffic, using Canadian classification ratings and official classification minimums, and look upon the proposal to introduce a third classification as one with the ultimate object of having it adopted throughout the Dominion, and thereby securing increased minimum weights on all domestic as well as international traffic. The Association here records its emphatic disapproval of any attempt to disturb the international rate adjustment as originally suggested by the railways, accepted as a compromise by the shippers, and provided for in the order of the Board, No. 3,258."

Supplement 1 to Classification 13.

This supplement is still under negotiation. Certain advances proposed by the railways have been objected to, and meetings have been held with a view of coming to some satisfactory understanding without the necessity of a hearing before the Railway Commission.

Ocean Bills of Lading.

Your committee recommends the adoption of the following resolution in support of the bill introduced into the Senate of Canada by the Honorable Mr. Campbell, cited as "The Water Carriage of Goods Act" :

"The Canadian Federation of Steamship Lines impose conditions in their bills of lading to which the shipper must subscribe, and which are intended to relieve the carrier from damage to goods whilst in transit. No such conditions are imposed by steamship lines operating from Eastern United States Atlantic ports :

"Canadian exporters via Canadian routes are thus being outrageously discriminated against :

"Therefore, be it resolved, that the Canadian Manufacturers' Association heartily endorse the bill now before the Senate of Canada, cited as 'The Water Carriage of Goods Act, 1908,' by which it is made illegal for the carriers to insert in their bills of lading conditions which are intended to exempt them from responsibility for loss resulting from their own negligence or omission, and which they are justly entitled to assume as public carriers."

French Steamship Subsidy.

The question of freight rates in connection with the contract to be entered into by the Government with some company for a regular steamship service between Canada and France was left over for further consideration.

Canadian Coasting Regulations.

A resolution passed by the Vancouver Board of Trade, and endorsed by the British Columbia branch, affecting the Canadian coasting regulations, was carefully considered by your committee. The manager was instructed to obtain some further information from the British Columbia branch, particularly as to how it is proposed to overcome the difficulty which apparently presents itself in shipping via the alternate route to the Pacific coast, namely, via Seattle, and submit it to the next meeting.

PARLIAMENTARY.

The report of the Parliamentary Committee, as presented by Mr. Atwell Fleming, read in part as follows :

General Inspection Act.

Owing to the objections raised by the Ontario tanners, as represented by the Tanners' Section of the Toronto Board of Trade, and the further protests of the hide dealers of the west, as voiced by the Winnipeg Board of Trade, it has been decided to take no part as an association in amending the General Inspection Act, to provide for the compulsory inspection of green hides, in order that the Association might have an opportunity of expressing its views on certain clauses which, regarded purely from a business standpoint, seemed to be unwise. At the first hearing the discussion had been entirely of a general character, but when details were reached, after the Easter recess, the Association would make its objections known.

Union Label.

Mr. Ralph Smith, M.P., has again introduced his Union Label resolution, but as the Government has already appropriated the time of private members for its own business, there is no possibility of the resolution being reached this session. Your Committee is informed, however, that Mr. Smith intends to press it to a vote next year.

Ontario Legislation—Conditional Sales Act.

At the urgent request of the threshing machinery and agricultural implement manufacturers, an effort was made in the closing days of the session of the Ontario Legislature to have an amendment to the Conditional Sales Act introduced, restoring things to the position they were in prior to the Lucas amendment of 1906. The Ministry, however, refused to take the matter up, claiming that it would be strenuously opposed by the rural members. It was accordingly decided to revert to the original plan of collecting as much evidence as possible, with the idea of submitting it to a committee of the Legislature early next session.

Franchise for Incorporated Companies.

The above measure has duly passed the Committee and will be incorporated in the Ontario Revised Statutes next year. This means that commencing with 1910 all incorporated companies will have a vote on money by-laws.

Quebec Legislation, Lacombe re Movables.

The above measure was introduced as an amendment to P. H. Burton, read in part as follows :

"In the case of sale of movable property with reserve of the right of ownership therein, the seller shall not recover possession of the property sold, upon default of payment of the purchase price in whole or in part, without restoring to the buyer a sum equal to three-fourths of what the latter has paid him."

While originally designed to protect poor families in their purchases of furniture, it was calculated to work great hardship on manufacturers and others by having goods thrown back on their hands after they were worn out. It was actively opposed by the Montreal and Quebec Branches, with the result that it was thrown out in Committee.

These branches were also successful in defeating an amendment to the Quebec Insurance Act, whereby it was proposed to make it illegal to place insurance with any company not licensed to do business in the Province. This would have proved a serious blow to those whose business is handled by the New England Mutuals. It will be further referred to in the report of the Insurance Committee.

Poole Publishing Co., Limited.

In connection with the assignment of the above company a dispute arose between the creditors and the holders of certain gold bonds, which were issued as a first charge on all the assets of the company, with the understanding that no mortgage had ever been given either on the real property or the chattels of the company securing the issue. It transpired on investigation that these bonds had been issued only a few days before the assignment, presumably for the purpose of placing the general unsecured creditors in a position whereby they would realize nothing.

The assignee contested the preference claimed by the holders of the bonds over the other creditors. The action was tried before Justice McMahon, who delivered judgment against the assignee, holding that the security was perfectly good as against ordinary creditors, notwithstanding the fact that the bond issue had not been registered.

This judgment is of a most vital character, over-riding as it does the Chattel Mortgage Act, and it can be seen with what disastrous results the principle can be manipulated at the expense of manufacturers and others giving credit to incorporated companies.

The case is now under appeal, with every prospect that the judgment will be reversed, but should it not, an amendment to the Mortgage Act will be introduced next session, compelling the registration of gold bonds of this kind.

INSURANCE.

The report of the Insurance Committee, as presented by Mr. P. H. Burton, read in part as follows :

Without entering into any unnecessary details, the Committee is glad to report that a number of large and somewhat complicated cases, which have been in progress for some months, have been brought to successful conclusion during the past few days. In each case substantial benefits have been secured for the members, while what is equally, if not more, important, conditions affecting Fire Insurance contracts have been brought into proper shape.

In the last week of March the Manager paid a visit to Winnipeg, when the opportunity was presented of meeting a large number of the members in that city. Advantage was also taken of the Annual Banquet of the Branch on March 26th to convey the greetings of the Association, and of speaking to a large gathering on modern Fire Insurance methods

and principles. The visit will, it is believed, develop the business of the Department in a section of the country where, owing to distance and rapidly changing conditions, we have not up to the present had the opportunity of rendering service to our members.

Quebec Legislation.

The Manager of the Department visited Quebec on the 28th and 29th ult., with an important delegation from the Montreal Branch, to protest against certain sections of the new Insurance Act, designed to prevent the placing of business in unregistered companies. The opposition of the Montreal Branch, supported by equally powerful opposition from the Montreal Board of Trade, has been successful to a large extent, and we are informed that an agreement has been reached with the Government, whereby the Act will be amended to provide that any commercial or manufacturing person or company may insure with any underwriter, association of underwriters or foreign mutual insurance company, not registered in the Province, on making a return to the Provincial Treasurer, and paying the tax that would have been paid by the company if the risk or risks had been insured in a registered company. We shall make further report on this subject to the next Council meeting.

Dominion Legislation.

The report of the Committee, which, in accordance with instructions of the last meeting, has been sent to every member, embodying the views of the Association on various aspects of the proposed Dominion Insurance Act, has been presented to and discussed before the Banking and Commerce Committee at Ottawa, and we were accorded a patient and sympathetic hearing. The Government is giving special consideration to the views expressed before that Committee and it is expected that various amendments will be brought down some time after the Easter holidays. Owing to the technical and difficult nature of the subject dealt with, more than ordinary care is evidently being taken by the Government, and profound secrecy seems to be the order of the day. The Committee will, however, keep the matter before them, and will report as occasion may require.

Following this report, which was moved by Mr. Burton, seconded by Mr. Ellis, the accompanying resolution was unanimously adopted by a standing vote :—

Resolution of Condolence.

"The Executive Council of the Canadian Manufacturers' Association have learned with deep regret of the death of Mr. J. W. Cowan, who for many years was a regular attendant at their meetings, and a faithful worker on the Insurance Committee since its organization. In his removal they feel they have suffered a distinct loss. His manly aggressiveness and sound business judgment always proved a valuable aid in advancing the interests of the Association, while his sterling qualities of heart and mind gained for him a high place in the esteem of his fellow-manufacturers. Both as a counsellor and as a friend he will be sorely missed by his business associates, who, in recording this expression of their regret, desire to extend to the widow and family of the deceased their sincerest sympathy."

RECEPTION AND MEMBERSHIP.

The report of the Reception and Membership Committee, as read by the secretary, recommended for acceptance the following twenty-nine applications :—

The Reception and Membership Committee beg to recommend the acceptance of the following applications for membership :—

WAKEFIELD, ONT.

Alexander Maclaren—Tweeds and jerseys.

WINNIEPEG, MAN.

Hooper's Marble & Granite Co.—Granite and marble.

TORONTO, ONT.

Standard Contracting Co., Limited—Plumbers' specialties.
The General Brass Works, Limited—Plumbers' supplies.
Henry Disston & Sons, Ltd.—Lumbering saws.
Gundy-Clapperton Co., Limited—Cut-glass ware.
Gundy-Clapperton Co., Limited—(H. G. Clapperton, 2nd member.)
The Thorne Manufacturing Co.—Picture mouldings.
The Reg N. Boxer Co., Ltd.—Wall paper.
The Reg N. Boxer Co., Ltd.—(F. M. Holbig, 2nd member.)
The Reg N. Boxer Co., Ltd.—(F. C. Hanson, 3rd member.)

ARNPRIOR, ONT.

Philip Dontigny—Tweeds, blankets, etc.

PORT DOVER, ONT.

The Port Dover Evaporating Co.—Vinegar and evaporated fruit.

INGERSOLL, ONT.

M. T. Buchanan, Ltd.—Haying tools.
Thos. Waterhouse & Co., Ltd.—Woollen underwear.
Ontario Fruit Package Co., Ltd.—Baskets and crates.

LONDON, ONT.

T. W. Hastings Cap Mfg. Co.—Hats and caps.
London Fence Machine Co., Ltd.—Fencing and fence-machines.

CHATHAM, ONT.

The Blonde Lumber & Mfg. Co., Ltd.—Builders' supplies.

PORT HOPE, ONT.

Standard Ideal Manufacturing Co.—(H. L. Bowers, 2nd member.)

HAMILTON, ONT.

Canadian Axminister Co., Limited—Carpets.

GALT, ONT.

The Canadian Brass Mfg. Co., Ltd.—Plumbers' supplies.

GODERICH, ONT.

The Doty Engine Works Co., Limited.—Marine engines.

BRANTFORD, ONT.

Brantford Roofing Co., Ltd.—Roofing material.

WALKERVILLE, ONT.

Walkerville Carriage Goods Co.—Dashes and carriage supplies.

SARNIA, Ont.

The Cleveland-Sarnia Saw Mills Co., Ltd.—Lumber and lath.
Doherty Manufacturing Co.—Stoves and special castings.
Standard Brass Mfg. Co., Ltd.—Plumbers' brass goods.
Standard Chain Company of Canada, Ltd.—Chains.

In compliance with the wishes of the Montreal Executive, it concurred in the suggestion that the convention be held at the Windsor Hotel, Montreal, from Wednesday to Saturday, September 16th to 19th, and that during the convention advantage be taken of the very kind invitation of the Montreal Harbor Board to take a trip around the harbor for the purpost of viewing the improvements which were being carried on.

Dealing with the invitation of the Guelph Board of Trade, the committee were, for various reasons, doubtful as to the advisability of accepting it, but on motion of Col. MacLean, seconded by Mr. P. W. Ellis, it was decided to accept, and to take advantage of the opportunity to pay a visit to the Agricultural College.

TECHNICAL EDUCATION.

While there was no report from the Technical Education Committee, the chairman, Mr. S. Morley Wickett, moved the adoption of the following resolution, which was unanimously carried :—

Resolution re Technical Education.

Whereas, the memorial of the Canadian Manufacturers' Association made to the Dominion Government jointly with organized labor for the early appointment of a Commission of

Inquiry on Technical Education came before the House of Commons in the form of a resolution, and although cordially endorsed by both sides, did not go to a vote by reason of special circumstances ;

And whereas, the need of such an inquiry in the interest of labor and business generally is urgent ;

And whereas, the Government has appropriated for the transaction of its own business the days formerly set apart for private members, thus making it impossible for our resolution to be voted on this session ;

And whereas, the memorial has the enthusiastic support of all interests,—Labor and Capital, Boards of Trade, Educational Institutions and the Press ;

And whereas, all the provinces have expressed themselves as agreeable to a federal inquiry in the interest of the country at large ;

Be it resolved, that this Council express its pleasure at the intimation recently given to a labor deputation by Sir Wilfrid Laurier that the Government was favorably considering the early appointment of the desired commission ;

Further be it resolved, that this Council express the hope that definite action will be no longer deferred ;

Further be it resolved, that a copy of this resolution be forwarded to Sir Wilfrid Laurier.

"INDUSTRIAL CANADA."

On behalf of the Industrial Canada Committee, Mr. McCullough reported verbally that the paper continued to make satisfactory progress financially. The special Trade Index Number, which was to be issued in June, was already certain to pay for itself. He referred to the improved character of the editorials and the sprightliness of the paper in general, expressing the hope that the improvements were finding favor with the members of the Council.

IMPERIAL NEWS SERVICE.

On behalf of the special committee, appointed at the November meeting to consider the establishment of an Inter-Imperial News Service, Col. MacLean reported that he had presented the matter at the annual meeting of the Canadian Press Association, together with a letter and number of pamphlets sent him by Sir Sanford Fleming. The Association had adopted a resolution asking the Government to continue the subsidy in aid of the Imperial News Service. With regard particularly to the resolution of the Victoria Board of Trade, Mr. John Ross Robertson, proprietor of The Evening Telegram, Toronto, who had been most active in promoting the news service with the United Kingdom, had presented a special report, which contained a great deal of information on the whole subject, a copy of which Col. MacLean attached to his report for incorporation in the Association's records.

TARIFF.

The report of the Tariff Committee was presented by the chairman, Mr. P. W. Ellis, and read as follows :

Your Tariff Committee begs to report the holding of its regular monthly meeting on Tuesday last, when consideration was given to the following matters

Cases of Dumping.

A number of instances of attempts at dumping were reported as a result of complaints received from various members. In the matter of pork products, it is suggested that as soon as the manager of the Tariff Department enters upon his duties it would be well for him to make a study of this case and offer the farmers the assistance of the Association in pressing for relief at Ottawa. Undervaluation in connection with the importation of malleable iron castings has been referred to the Chief Inspector of Customs, and is now under investigation. The same officer has also been advised of alleged instances where false representations have been made in connection with the importation of threshing machine parts, and a strong effort will be made to have abuses of this kind stopped.

Collections Under Dumping Clause.

Inquiry made of the department at Ottawa shows that for the nine months ending March 31st, 1907, the total collections of special duty under the dumping clause amounted to only $72,683.31. When it is considered that this covers the whole of Canada, and when it is recalled how keenly Canadian business has suffered from the competition of undervalued importations from across the border, your committee feel that the figures themselves are a condemnation of the department for its lax enforcement of the regulations.

Fusel Oil.

It is recommended that the application of the Canadian Bronze Powder Works, Montreal, for a cancellation of the excise of 15 cents per gallon on fusel oil be endorsed when this oil is to be used in the manufacture of amylacetate. Under present conditions, all the fusel oil turned out by Canadian distillers is being shipped to the United States, where it is made into amylacetate and re-imported into Canada. By removing this excise, and placing possible Canadian manufacturers on a par with the manufacturers in the United States, it is almost certain that a new industry will be gained to the country.

Detroit Tunnel.

Following the instructions given by the Council at its last meeting, a strong letter of protest has been sent to the Minister of Customs regarding the continued free admission of United States material for use in the construction of that portion of the Detroit River Tunnel lying between the portal and the water's edge on the Canadian side of the river. It has been pointed out to him that while the arrangement was understood to be reciprocal, the instructions given the Collector of Customs at Detroit by the department at Washington are so worded that he would be quite within his rights in holding up any Canadian shipments for duty unless they were for use in that portion of the tunnel lying immediately under the river bed. As the item in the tariff under which Canadian officers admit foreign material free plainly states that it is to apply only when similar materials are admitted free under similar circumstances into the United States, the department has been urged to take advantage of this technicality to cancel the privileges accorded, and thus to give Canadian interests a fair deal.

Manager of Tariff Department.

A special meeting of the committee was held on March 28th to review the various applications for the position of manager of the Tariff Department, and after the most careful consideration it was decided to offer the appointment to Mr. R. W. Breadner, Dominion Appraiser, Ottawa, at a salary of $3,000 per year. Mr. Breadner is a man of long experience and thorough practical training in tariff matters. He is also an indefatigable worker, and has the reputation of being the best informed man on tariff matters generally that the Customs Department has in its employ. It is felt that in his hands the Association's new department can be of great immediate benefit to the membership at large. By his intimate knowledge of the manner in which the business of the department is transacted, it is confidently expected that he will be able to handle all matters entrusted to him by members of the Association with the utmost satisfaction and dispatch.

A letter has been received from him stating that if the Council endorses the report of this committee, so far as relates to his appointment, he will report for duty on or about the 11th of May. In leaving the service of the Government for a yearly engagement with the Association, he forfeits his right to the superannuation allowance which would be coming to

him in the course of another eleven years. He is, therefore, sacrificing a future which is assured him for what he considers the wider opportunities offered by the Association. Your committee has not hesitated to urge him to make the change, feeling certain that if he has the ability they believe he has he will make a permanent position for himself with the Association.

Discussing the clause relating to the issue of gold bonds, Mr. Waterous stated it had been represented to him that under the present law one incorporated company could sell out to another, which might practically be the same company so far as the shareholders were concerned, before the creditors of the first company could secure control of the assets. This opened the door to all kinds of dishonest practices, and he thought that something should be done to make such action illegal. He was requested to submit a case for the consideration of the Parliamentary Committee.

In moving the adoption of the report, Mr. Ellis reviewed with considerable detail the situation which had confronted the present Tariff Committee on commencing its work last fall. Its members felt that the Association had not been as successful in its tariff campaign as it might have been for the reason that the Tariff Committee was not sufficiently informed as to tariff details. They had felt that to make themselves of practical use they must take up specific cases, but in doing so they soon found themselves saddled with more work than they could handle, and the Secretary found himself called upon to undertake work which his lack of technical knowledge prevented him from doing justice to. The only solution seemed to be to follow the course marked out by the Insurance and Transportation Committees, viz., by engaging a tariff secretary. He then reviewed the negotiations with the Finance Committee culminating in the vote of the Council appropriating $5,000 for the establishment of a tariff department for a period of one year.

Dealing with the applications for the position, and the considerations which had influenced the committee to make its present recommendation, he took occasion to refer in the highest terms to the splendid qualifications possessed by Mr. Breadner. He cited a number of instances where the expert knowledge possessed by that gentleman had been of great value to members of the Association, and predicted that with his services continually at their disposal, a great deal of practical good could be accomplished.

The report was seconded by Mr. Burton, who expressed the belief that if the new officer could be instrumental in checking the undervaluation which was being carried on so extensively, he would be doing the members a splendid service. On motion the report was carried unanimously and with great satisfaction.

BRANCHES.

The reports of the Montreal and Toronto branches were taken as read, and ordered to be published in "Industrial Canada."

Under the head of new business, Mr. Dunn inquired, as chairman of the Railway and Transportation Committee, whether it was the wish of the Council that the Association's views regarding appointments to the Board of Railway Commissioners, should be presented to the Government by letter or in person. Upon a vote having been taken, it was decided to forward the recommendations by letter.

Mr. Torrance expressed pleasure as a manufacturer from Guelph that the Council had decided to meet in that city in June. He assured them that their visit to the Agricultural College would be most instructive, and on behalf of his fellow-manufacturers he promised that everything possible would be done in other ways to make the visit enjoyable.

The meeting then adjourned.

TORONTO BRANCH.

At the regular monthly meeting of the Executive a letter was read from the Young Women's Christian Association, asking the Branch to give its active assistance to them in their efforts to provide suitable homes for the girls who are employed in Toronto factories, shops and offices. While the Executive is thoroughly in sympathy with this work, and is satisfied that the objects of the Y. W. C. A. deserve the support of every employer of girls, it did not see its way clear to lend any assistance in the name of the Association, as to do so would inevitably lead to similar requests from organizations with equally worthy objects. Several members of the Executive will, however, in their individual capacity do all they can to help the movement along, and the Executive appeals to every Toronto manufacturer to do likewise.

Technical School Site.

The agitation the Branch Technical Education Committee has carried on to have the site for the new Toronto School situated west of Spadina instead of on Bloor St. East, near Jarvis, as at first decided, is resulting successfully, and the Board of Education are applying to the city for additional funds to purchase a suitable site where the different interests of the city desire it.

British Loan Companies in Canada.

As the result of a report received from London, England, the Branch has decided to make no recommendations with regard to the suggestion made some time ago that it should endeavor to induce British Loan Companies to open branches in Canada.

Annual Meeting.

The annual meeting of the Branch will be held the fourth Thursday of June this year, three weeks earlier than usual. The change was made because the attendance has been small in the past owing to many members being away on vacation in July. It is sought to avoid this condition this year.

All of which is respectually submitted.

MONTREAL BRANCH.

The session of the Quebec Legislature, now nearing a close, has required more careful attention on the part of the Montreal Branch than any for some years past. The Insurance Bill introduced by Hon. W. W. Weir contained a clause which was designed to prohibit insurance being placed outside the country. Whether this was within the power of the Quebec Legislature or not was a disputed point, but rather than trust to this being the case the Branch took this matter up, and at a meeting of some twenty-five manufacturers interested it was decided to engage the services of Mr. A. J. Brown, K.C., and make representations to Quebec to have the bill amended. Two large delegations waited upon the Provincial Treasurer, the second one having the opportunity of arguing the matter in the presence of representatives of the stock insurance companies. Mr. Brown also attended before the Legislative Council, and we are happy to report that the bill was so amended that no restrictions will be placed upon manufacturers insuring outside the country except that they will have to report all such insurance to the Provincial Treasurer.

It being reported that the Quebec Government would put through a bill reducing the hours of labor for women and children in factories, one of our delegations had an interview with the Minister of Labor, and obtained the assurance that the matter would not be pressed this session.

Opposition was made to the dangerous bill regarding the sale of movables, and we are happy to report that this bill was thrown out.

The different convention committees are now meeting and making preparations for the September gathering of the Association in Montreal.

VOL. VIII. JUNE 1908 No. II.

INDUSTRIAL CANADA

TRADE INDEX NUMBER



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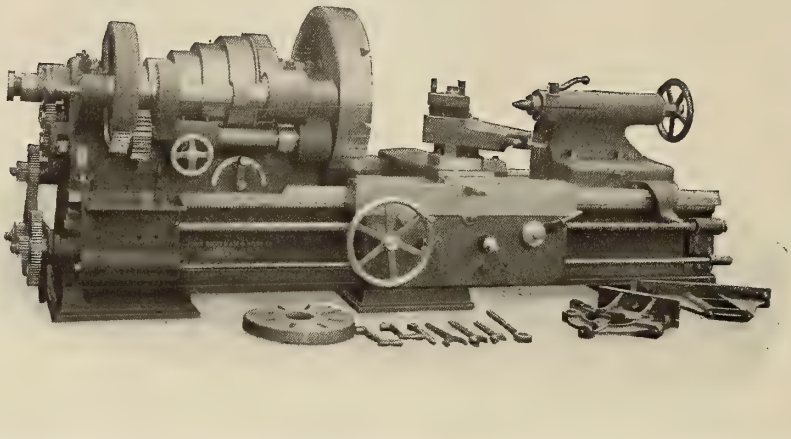
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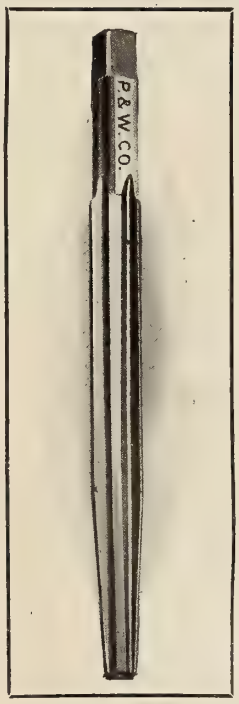
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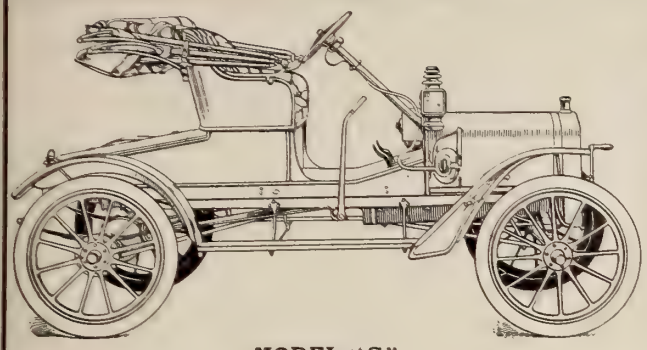




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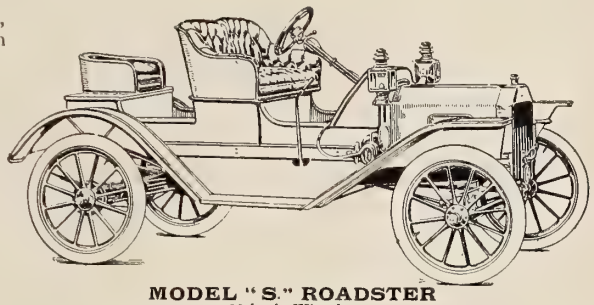
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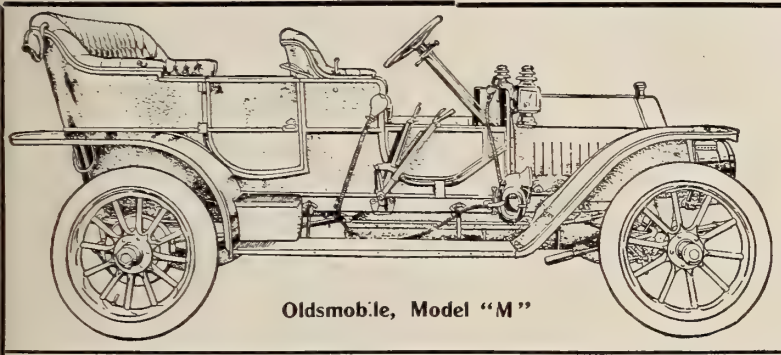
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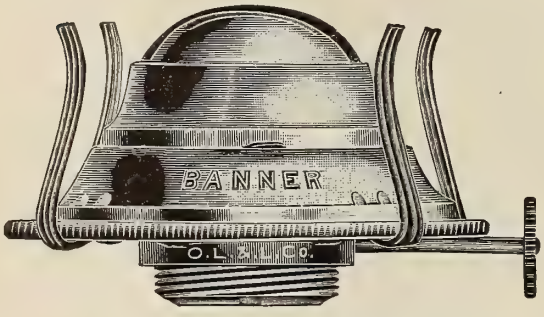
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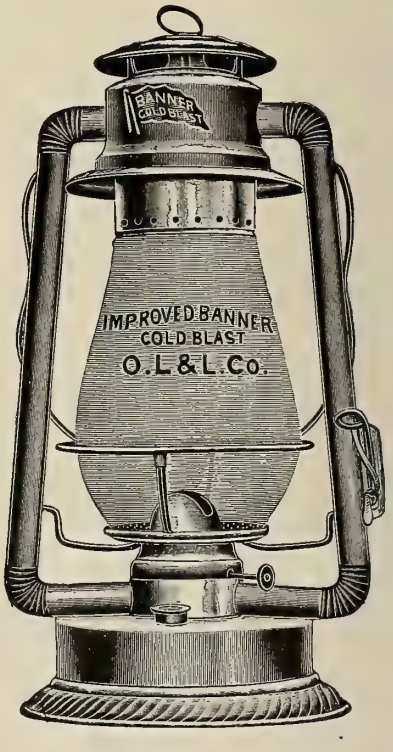
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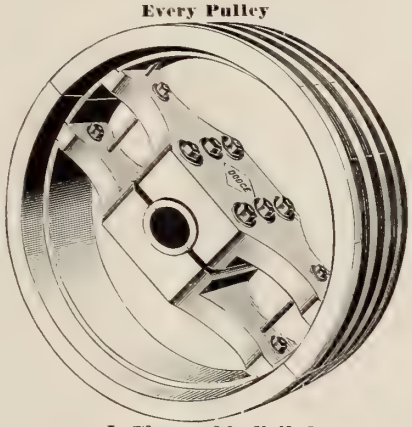
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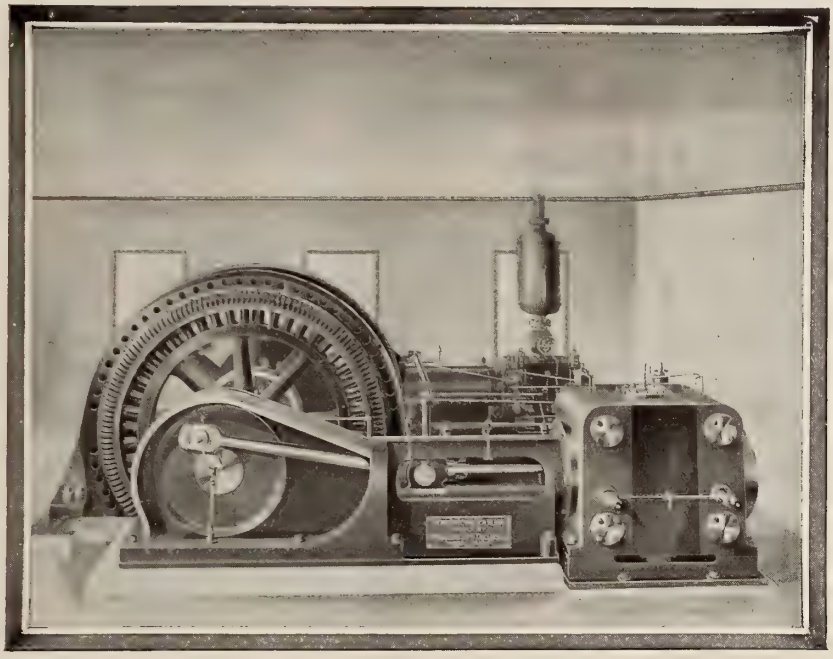
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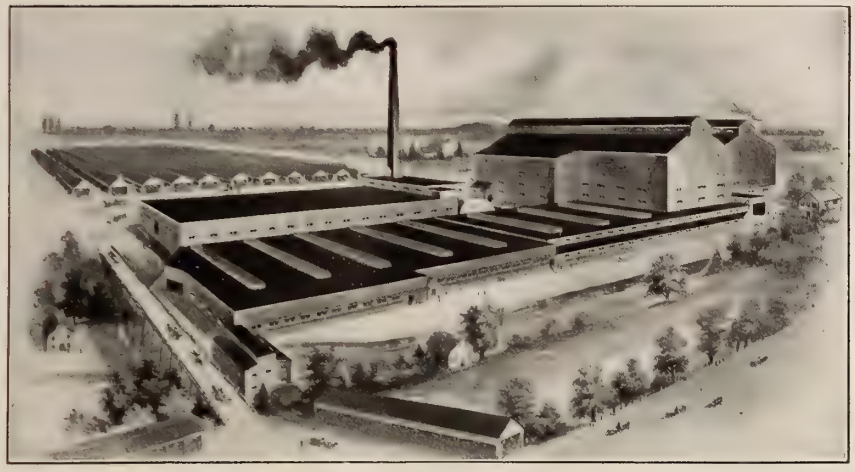
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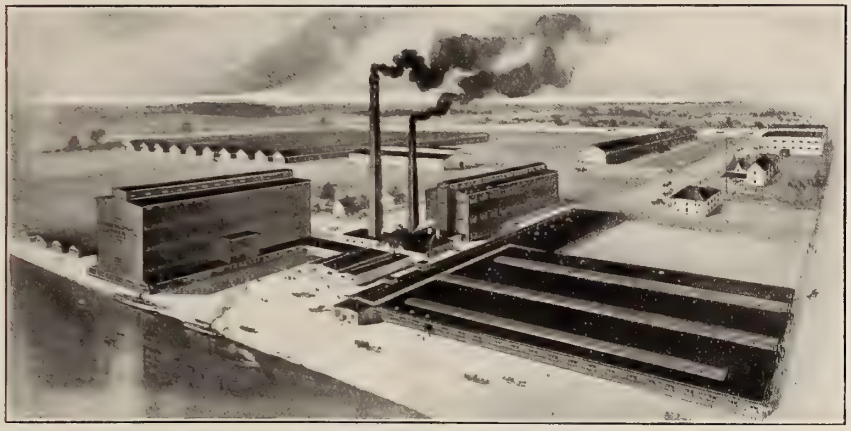
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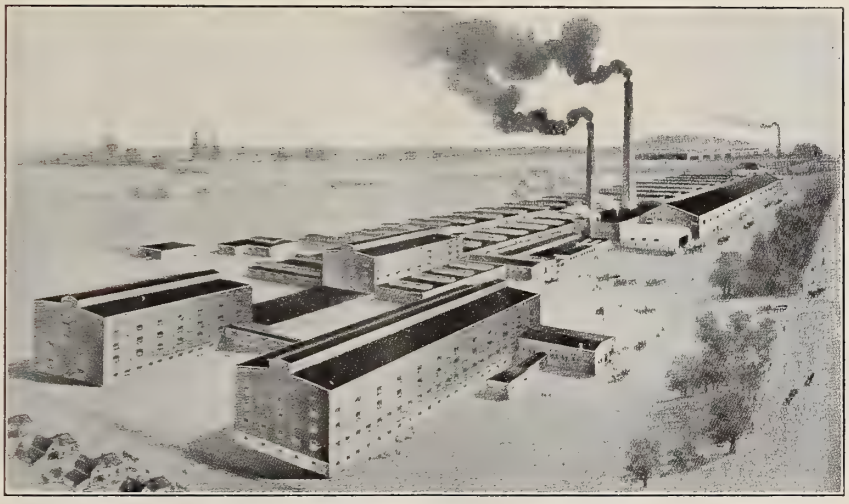
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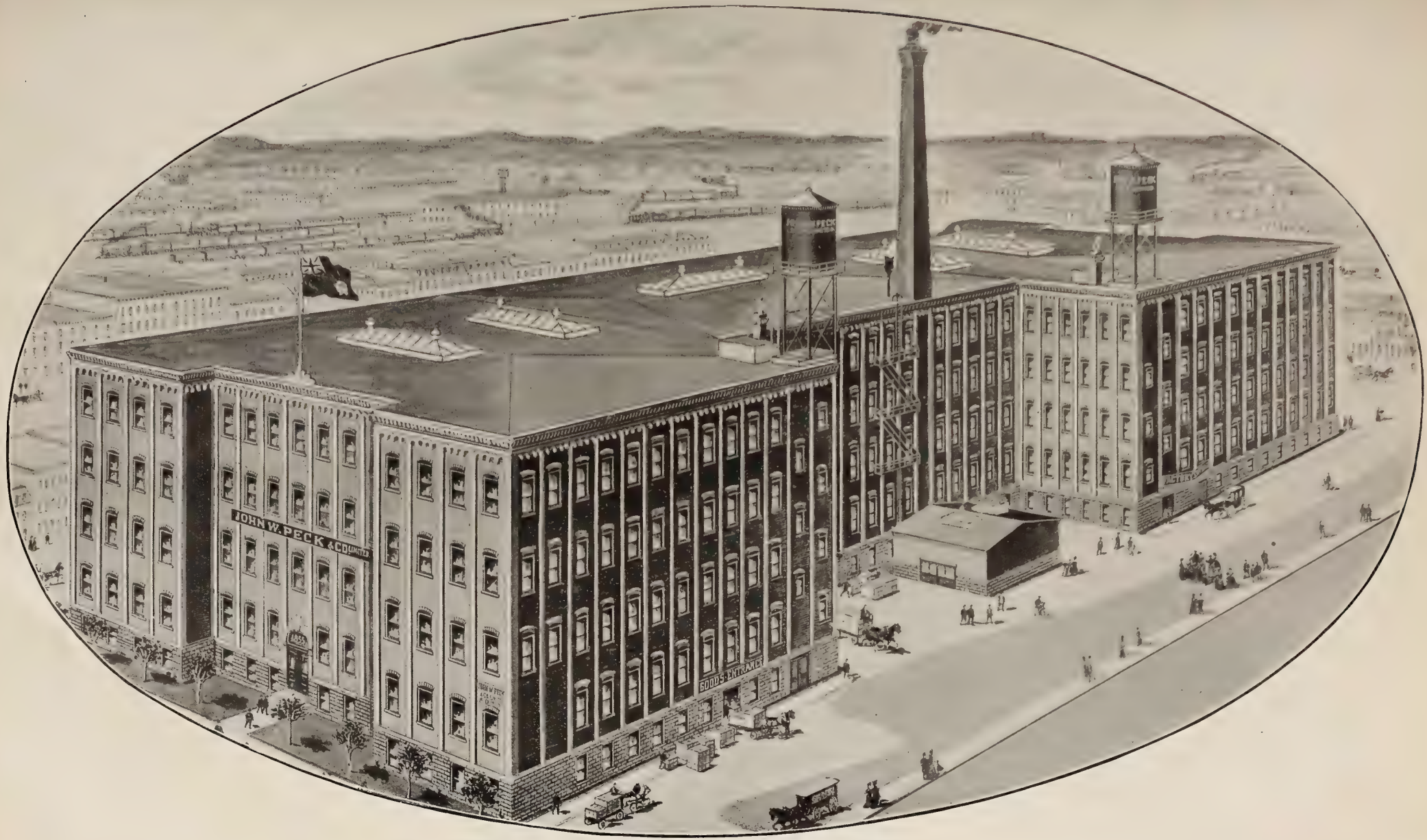
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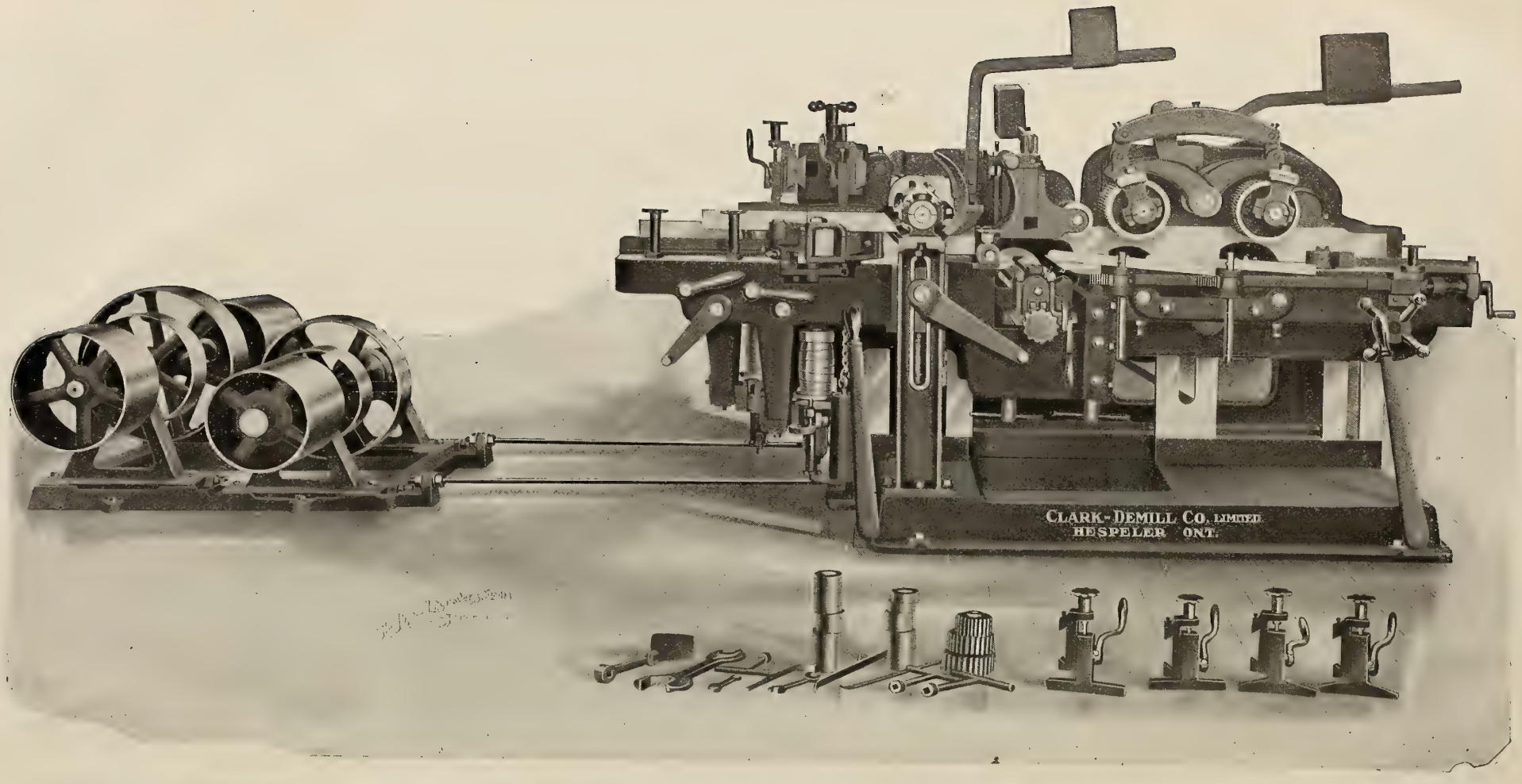


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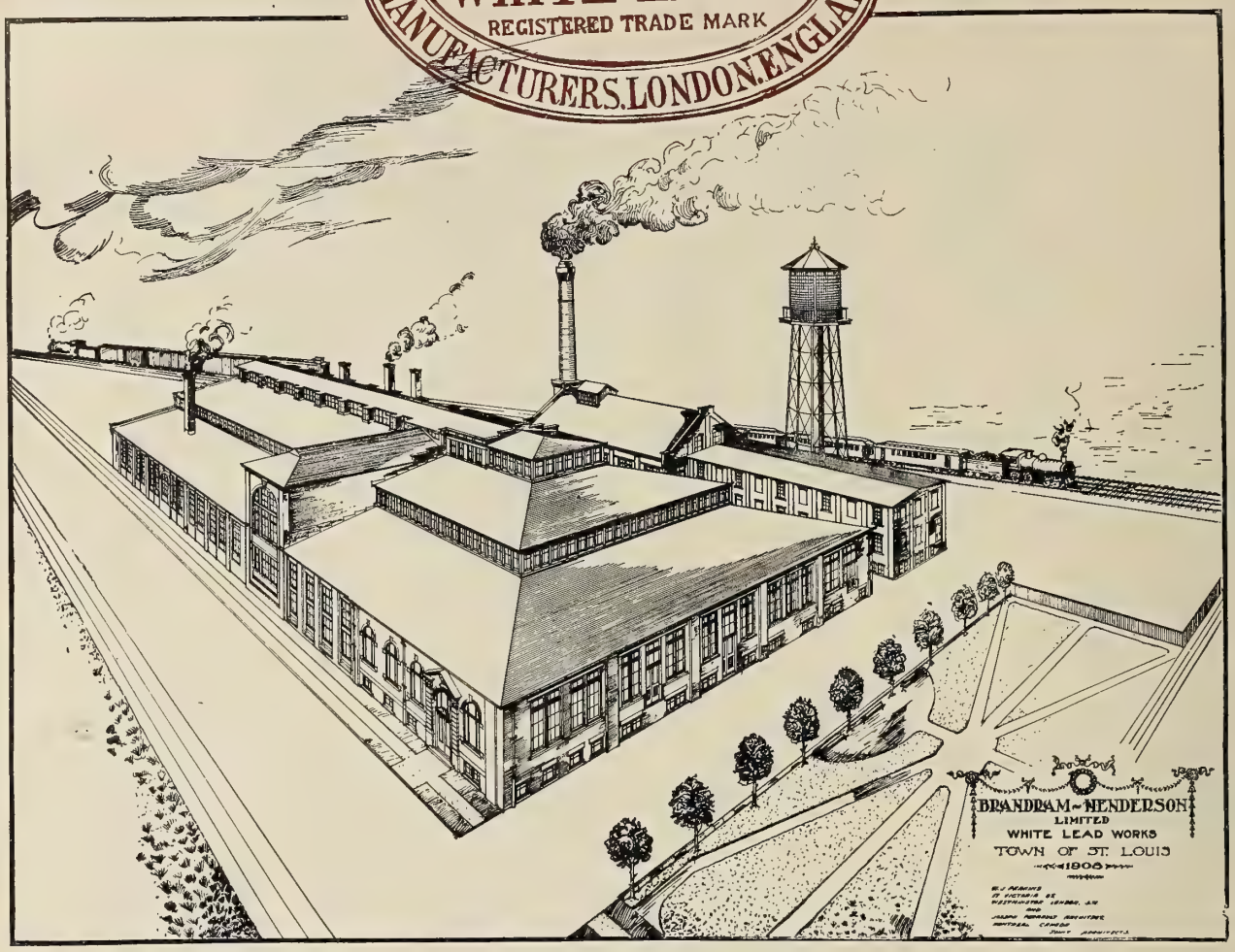
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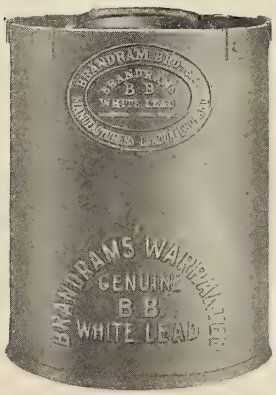
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A BIRD'S eye view from the architect's drawing of the new Corroding Plant, Paint and Dry Color Factory of Brandram-Henderson, Limited, now nearing completion at St. Louis de Mile End, Montreal, P.Q. The property on which these buildings are situated has a track frontage of about 1,000 feet, directly on the main line of the C.P.R. The main building, 300 feet long, and 150 feet wide, is a massive structure of pressed brick and grey stone trimmings. It is practically fire-proof and has a frame of steel and floors of reinforced concrete.



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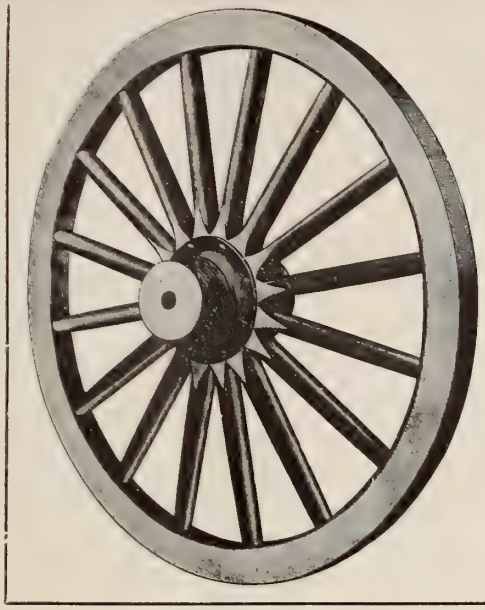
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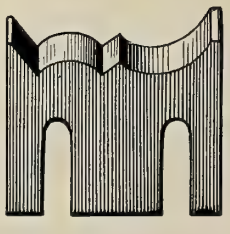
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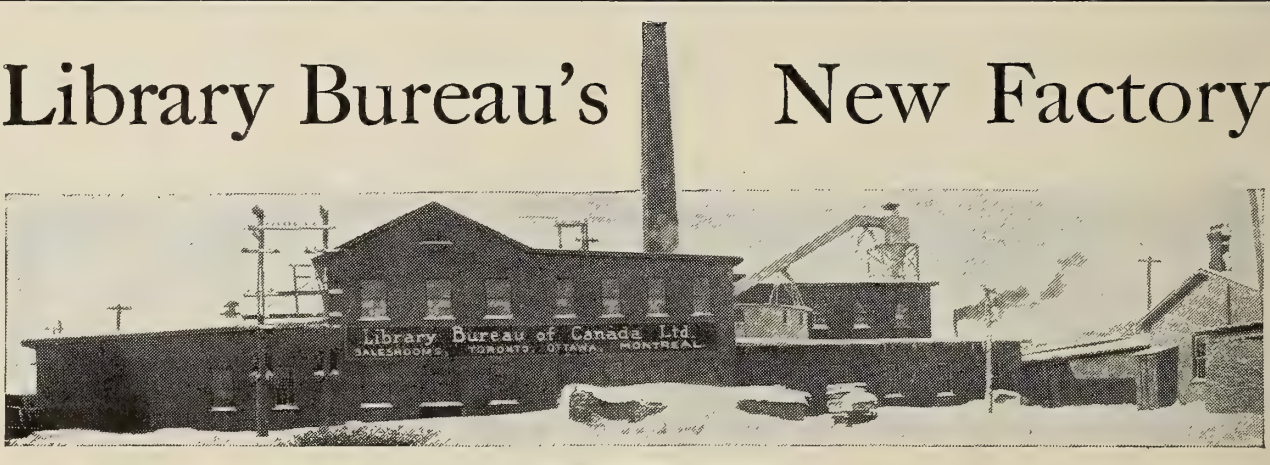
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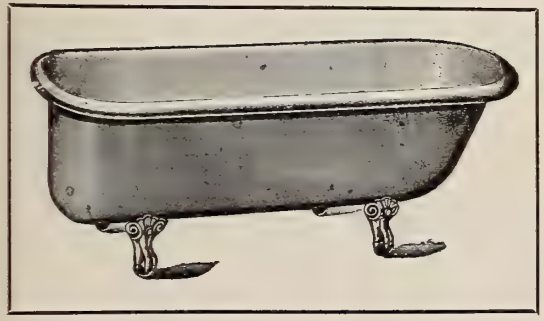
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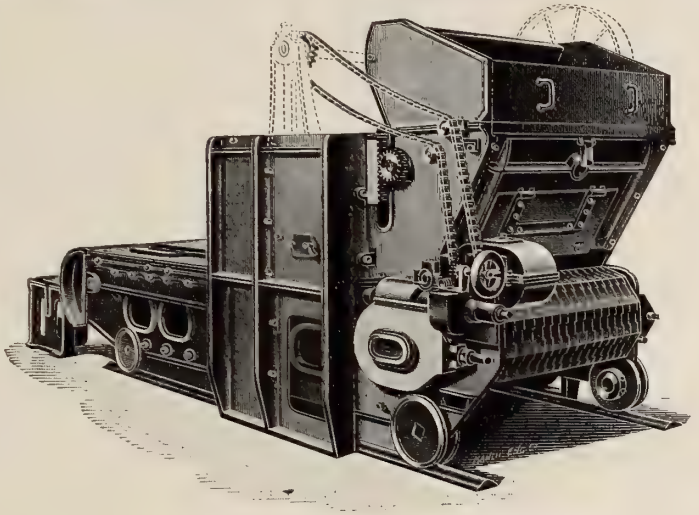
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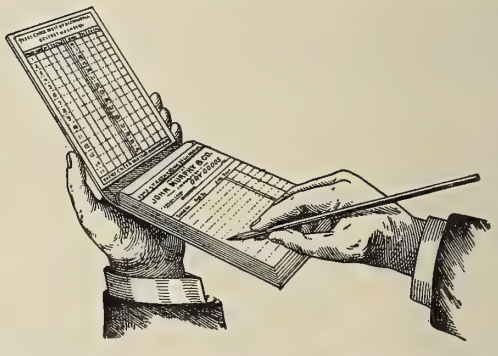
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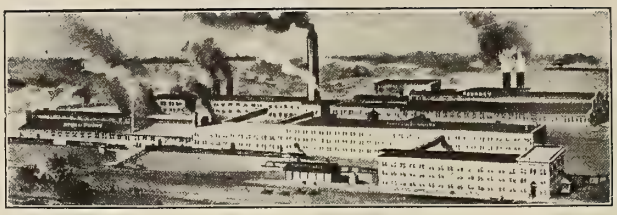
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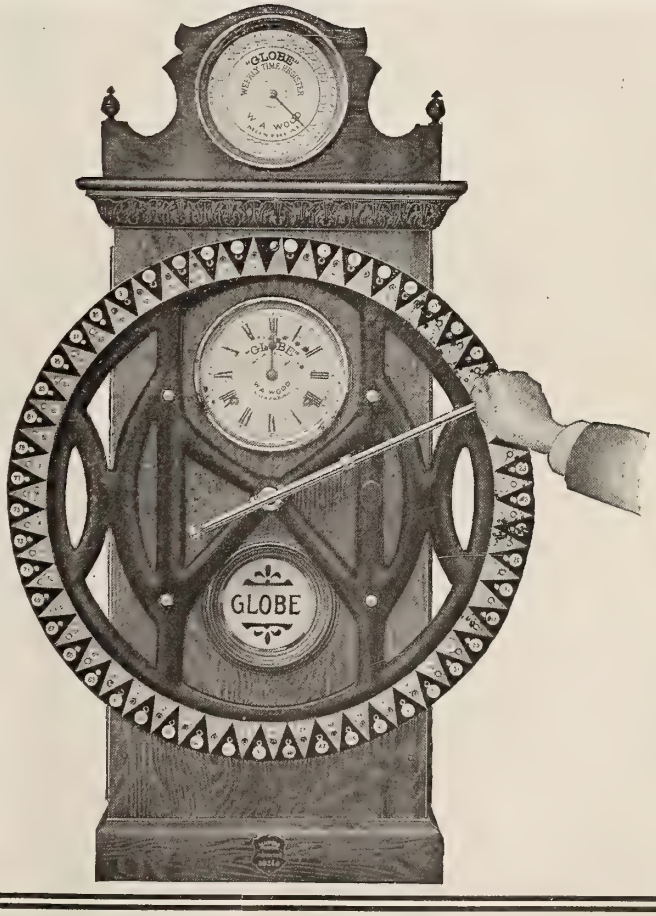
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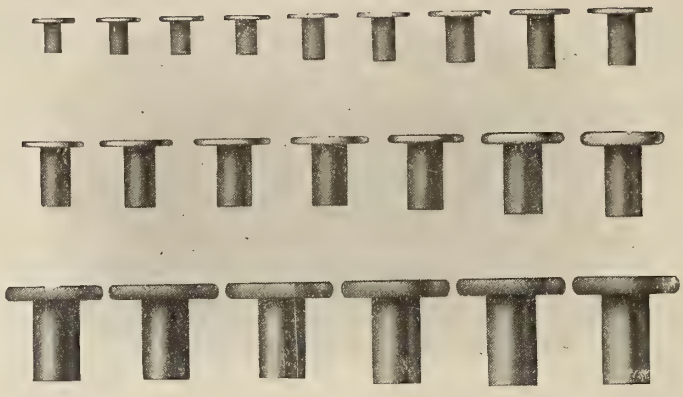
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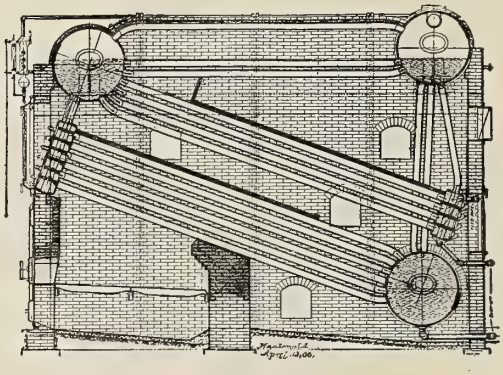


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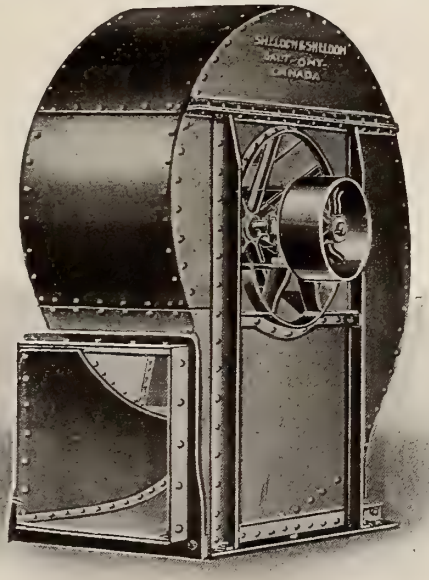
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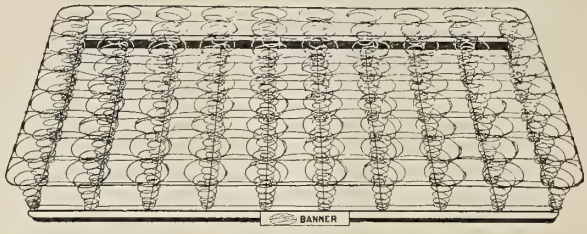
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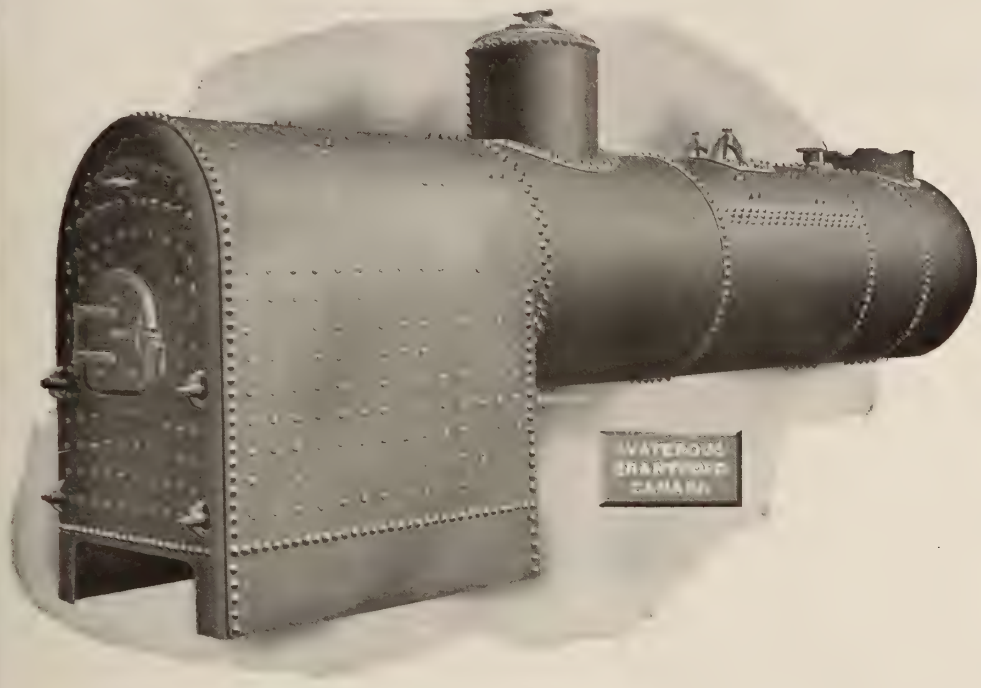
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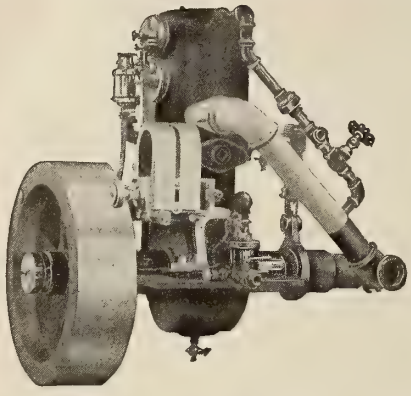
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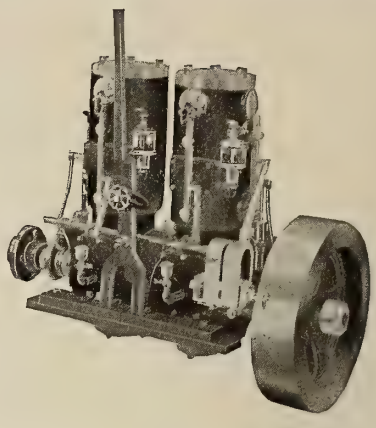
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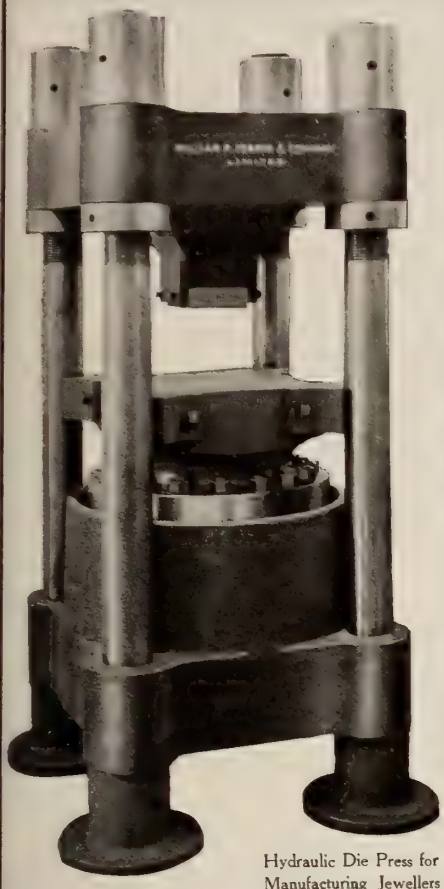
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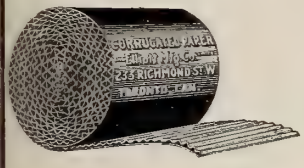
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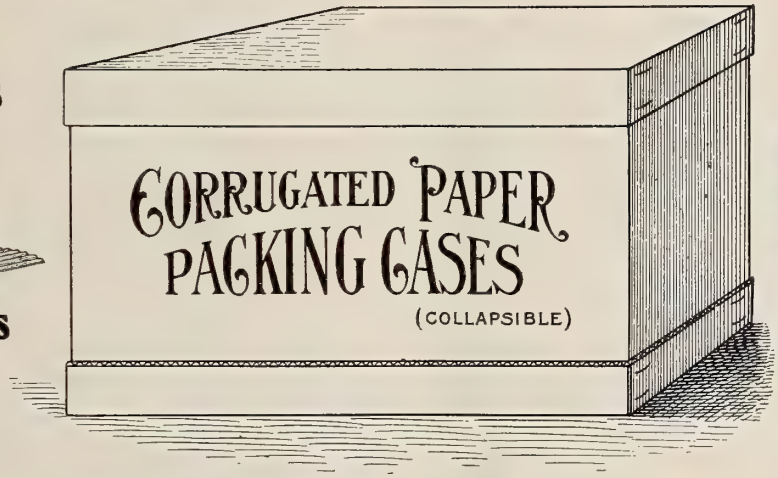
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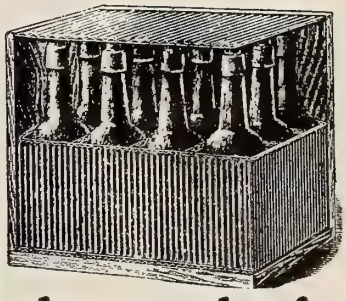
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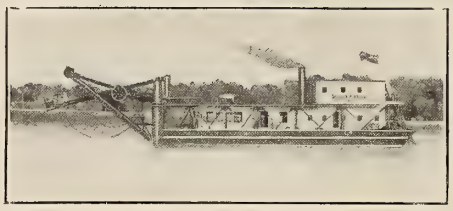
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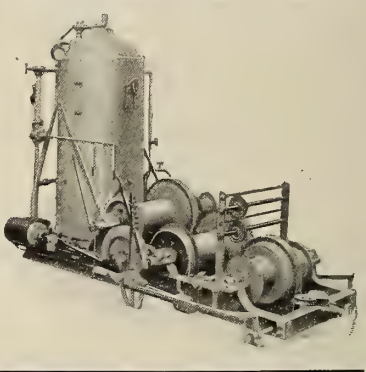
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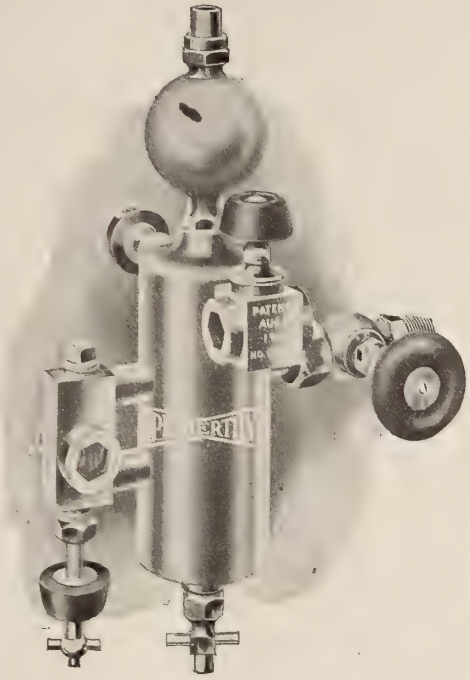
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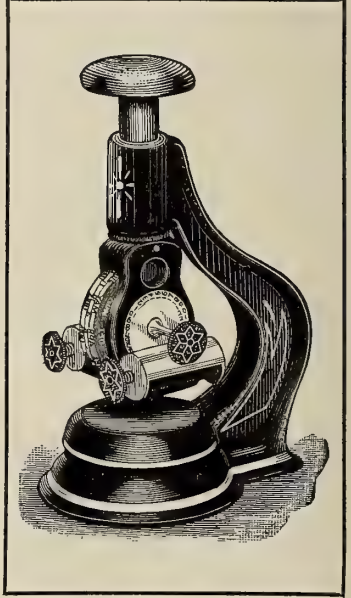
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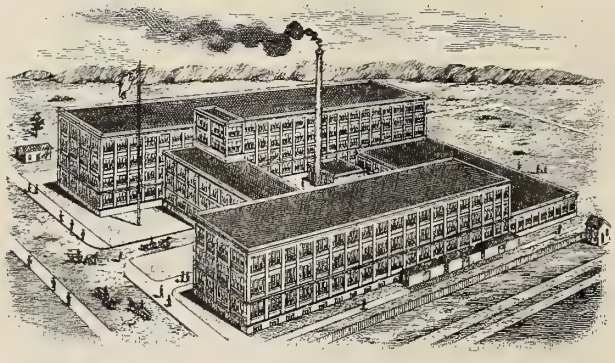
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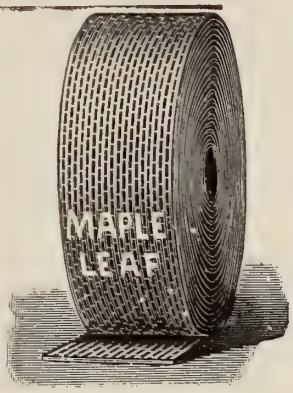
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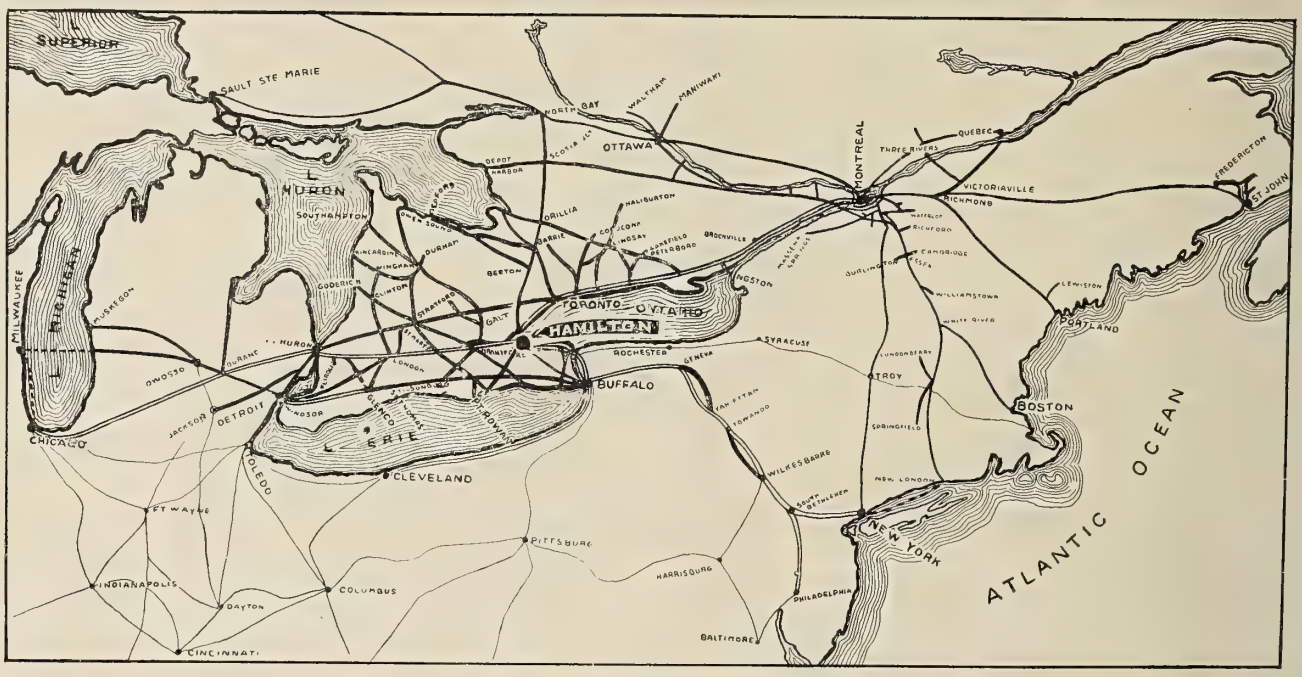
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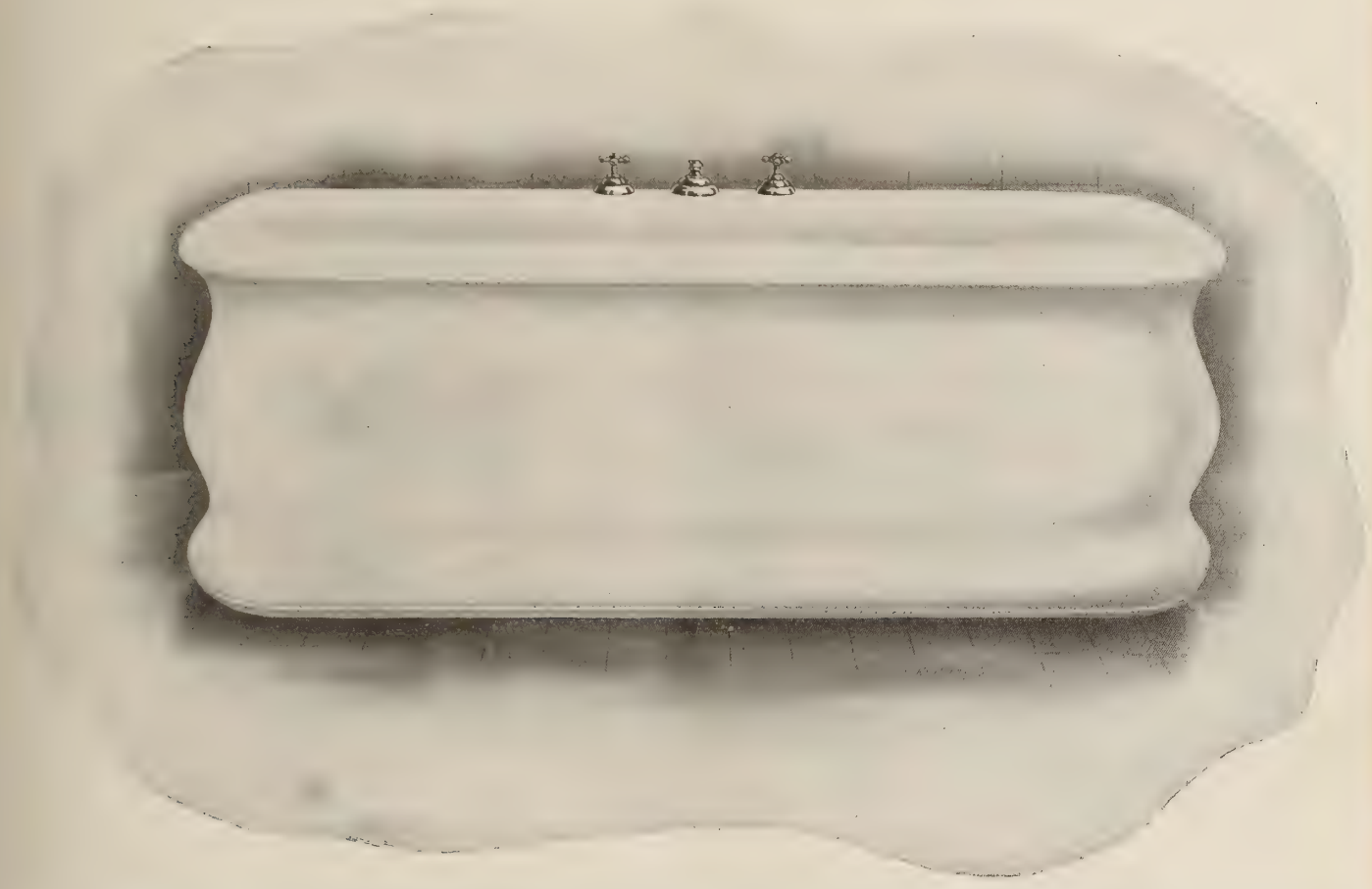
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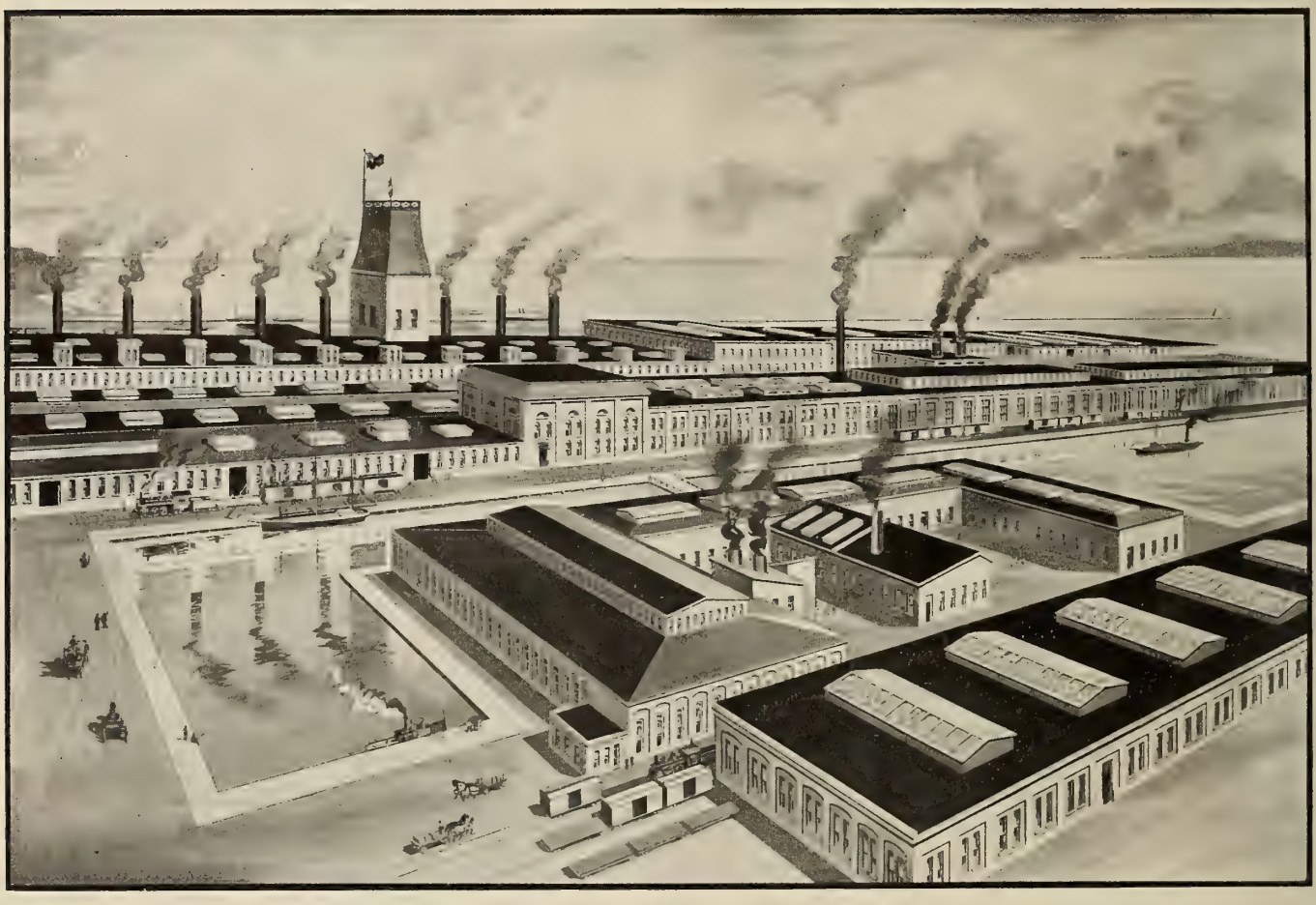
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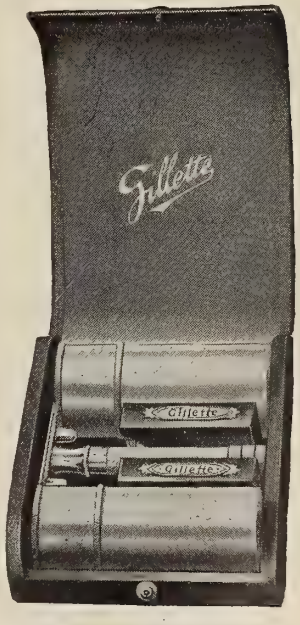
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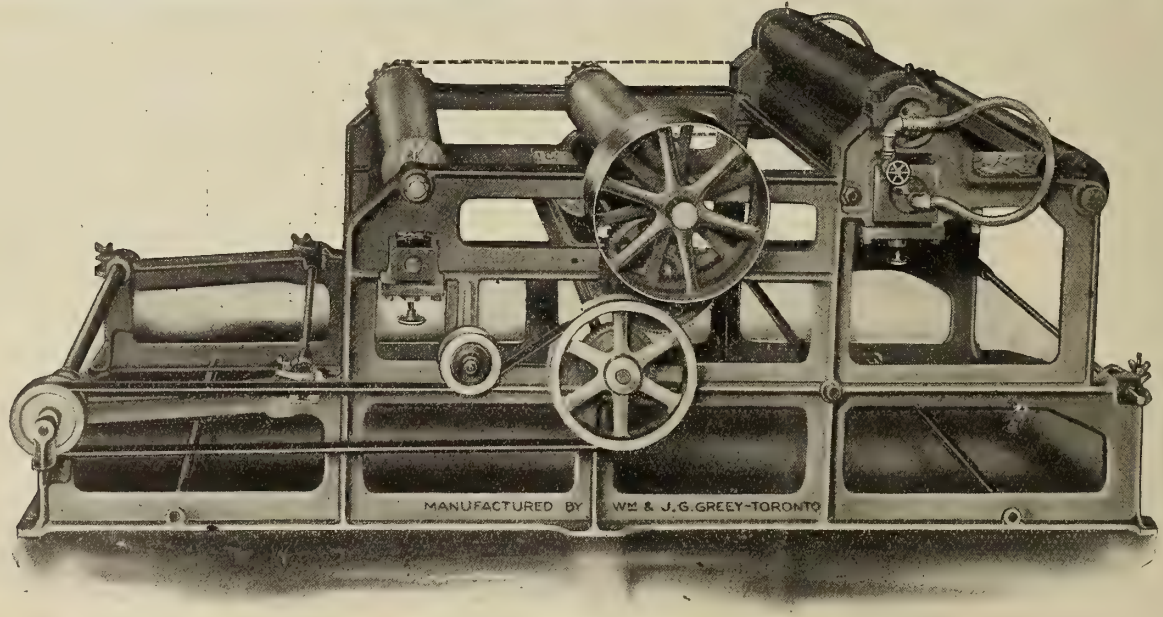
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Vol. VIII. TORONTO, JUNE, 1908 No. 11

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

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THE EDITORIAL VIEW POINT.

An Old Acquaintance.

ALL of us who took an interest in Canadian politics in the days when Unrestricted Reciprocity with the United States was the principal plank in the platform of one of our political parties, remember that the chief argument urged against that policy was that it would lead Canada into annexation with the republic to the South, and was for that reason unpatriotic. A tariff wall, it was claimed, was our last protection against encroachments from our powerful neighbor. The Unrestricted Reciprocity advocates made light of these objections, declaring them to be the wild ravings of the imagination. However this might have turned out, the mass of the Canadian people felt that the best way to build up this country was to hold its trade as far as possible for its own people, and any one who has appreciated the vast strides we have made in the past few years, will readily acknowledge that time has vindicated the choice then made by the people. On the other hand, there are still people in the United States, and amongst them some nationally prominent politicians, who think that the throwing down of the tariff wall would eventually lead to the entry of Canada into American Union. Governor Johnson, of Minnesota, who is a candidate for the Democratic nomination for President of the United States, recently made a speech on trade relations between the two countries, in which he expressed this belief: "The flag," he said, "would follow the trade of the United States and, before many years, would float over Canada if the tariff wall were torn down between the countries." If this man's arguments are sound, it is clear that we have to thank our tariff wall for more than the building up of our factories—we have to thank it for our very existence as an independent country. At this late day there is no possible chance of Canada entering into any such trade relations with our neighbor. Our hold on the future is too strong and our prospects too bright, to allow strangers to come in and take them from us.

Protection in England.

A CORRESPONDENT in last month's issue of "Industrial Canada" took exception to some remarks we had in the April issue on "Protection in England," pointing out that England has the greatest foreign trade of any country in the world, surpassing all the high tariff countries. He called attention to the depression in the United States, and wanted to know why it is that the high tariff there does not cure the case. He carefully avoids pointing out that the depression in the United States is identical with the depression in England, that the money stringency and falling off in business is world wide, striking all alike. There is nothing in this argument whatever. But the fact that does stand out above and beyond all others, is that the United States with its high tariff has, in a single century, developed what was a mere colony in a wilderness into one of the most powerful as well as one of the greatest manufacturing countries in the world.

The one predominating feature of all trade legislation in the United States has been and is "America for the Americans," and it has won. It is impossible to conceive any greater success, from a purely commercial point, than they have made; but if our correspondent is right, we would have to conceive of a free trade nation eclipsing it. To say that England's trade is greater is only saying that the nation that started several centuries ahead is not yet overtaken. The point in our former article was that while England's trade in the past has been growing under a free trade policy, the belief is gaining ground over there that the time is near at hand when protection will have to be resorted to in order to retain what has been won. The British market is free to every nation, but the British manufacturer has to pay for the privilege of selling his products abroad. In the past, when he had some advantages in methods and in shipping this did not greatly handicap him; but now that other countries have adopted or improved on his methods, and have got shipping facilities equal to his own, he naturally feels that he cannot much longer continue to give everything, and get nothing in return. It is this awakening that has given rise to the tariff reform movement, which has already grown strong enough to carry bye-elections and send one cabinet minister down to defeat.

How the Tariff Helps.

WHY does the British capitalist invest his money all over the world; why not put it into manufacturing at home, if the Free Trade Policy is such a great advantage to the industries of the country? The answer is that the British capitalist, in order to overcome the tariff restrictions in, say the United States, puts his capital into manufacturing there, which gives him two free markets instead of only one. He has the United States market because his goods are made in the United States, and he has the British market on just as good terms as if he had built his factory at home. The Free Trade Policy of England is really an inducement to British manufacturers to put their money into foreign factories. On the other hand, what a good thing the high tariff is for the United States? It is the magnet that draws foreign capital to it. Canada is in exactly the same position, and we are seeing every day how the tariff benefits, not merely the manufacturer, but every one of us. The very pen with which this article is written is an evidence of what the tariff is doing for Canada. It is the product of the L. E. Waterman Company, of Canada, a company that owes its existence to the tariff. The parent company, the L. E. Waterman Company, of New York, found that the only profitable way to supply pens to the Canadian people was to make them in Canada. For three years they had tried to bring them in despite the duty, and while they have built up the largest trade in their line in this country, as it is in every other country, still the item of duty represented such a large margin of the profit, that they concluded that the pen for the Canadian people must be "made in Canada." To-day they are busy erecting, close to Montreal, a modern factory to turn out pens for Canadians, and when it starts operations in the fall, several high class mechanics will be added to our population. This is only one instance of what the tariff does. Another is the Cudahy Packing Company, of Omaha, who are already turning out one of their products from a factory in Toronto, and their Canadian manager, Mr. Dix, told the writer a few days ago that within a comparatively short time they would have an immense soap factory in operation in this country, as it is impossible to import their laundry and toilet soaps, and compete with the excellent lines already made here. The International Harvester Company, of Hamilton, the Westinghouse Company, of the same city, the Quaker Oats factory at Peterboro, and a host of others already here bear witness to what the tariff can and does do. As stated in a former issue of "Industrial Canada," since the first of January more than $100,000,000 of British money has come to Canada for investment, and it can be demonstrated that the most of it is coming here because of our protective policy. If we had free trade, the United States manufacturer would ship his goods in here from his United States plant, and the British investor would use his money to enlarge his manufacturing plants at home. There is no sentiment in business; it is all a matter of profit and loss figured out in percentages. A 25 per cent. duty does more to establish factories on Canadian soil, furnish employment for Canadian workingmen, and create a market at home for Canadian farmers, than a million tons of sentiment could do in as many years.

The Strike Mania.

THE regular spring epidemic of strikes is raging at the present time. The building trades in several cities are seriously hampered by the refusal of workmen to accept employment on reasonable terms A few weeks ago the same men were crying out for work to do, and in some instances even marching on civic authorities and demanding employment. The wail of the unemployed was raised in several of the larger cities, and the public asked to sympathize with the hard lot of the man who had no work to do. No sooner, however, was work available than the tune was changed, and the supplicant became a dictator. Mr. Agitator, who was helpless to aid the workingman in his time of need, and kept in the background, is now very much in evidence, working as hard as ever at his old game of making trouble between employers and employees. Meantime the days are passing into weeks and months, and the harvest time of the building laborers and mechanics is passing in idleness. The workingmen fail to appreciate that conditions are not as they were, or if they do appreciate it, they are not willing to stand their fair share of the reduction in prices which have come with the depression. When times were unprecedentedly prosperous, as they were twelve months ago, the working-

man was not slow in demanding his full share in the profits. Wages were increased until they reached a point where it became impossible to pay them. The depression which followed was in no small measure due to the prohibitive scale of wages demanded by the workingmen. To expect, under the changed conditions, that the old scale can be maintained, is ridiculous. If the employers could not pay them and make a profit in boom times, they certainly cannot afford to pay them at all in times of depression. In every commodity in general trade there are fluctuations in price; it is ridiculous to think that the commodity which the workingman has to sell—his labor—can possibly remain either fixed at the highest figure of the past, or be increased indefinitely. Supply and demand determine the price of labor. Unionism cannot change the natural laws of commerce, and the sooner the man with labor to sell realizes this, the sooner will a proper understanding be arrived at.

The Man and His Hire.

ONE of the most unreasonable positions taken by the unions is that all union men are equal. Equality is nowhere else set down in such dogmatic fashion, except in the United States Declaration of Independence, and there it is confined to infancy, and in the pronouncement that the grave makes all men equal. All through the rest of life there is inequality. Nature abhors equality. Unionism alone maintains the doctrine in the face of everything. All union men in any given calling are to be paid equally for their time. That there is a difference in the quality or amount of work they perform does not enter into the calculations of unionism. They insist on selling time, and they fix its value by the hour or by the day. What the employer wants to purchase is labor, and he has a perfect right to insist on fixing its value according to quality and amount. As well might the farmer insist on selling his hay by the time it took to grow, instead of by the ton, as for the laborer to make time the standard of value for his services. Time belongs to no man, and no man has a right to sell what he does not own. The trouble between the building trades and the unions is in a large measure due to this dogmatic doctrine of value. When the bricklayers wages were 35 cents an hour, the average workman laid 1,200 bricks a day; last year with wages at 50 cents an hour the average number of bricks laid per day was only 800, yet the union demands that 50 cents per hour be the fixed rate of wages for all bricklayers regardless of how much work they are capable of performing. The employers offered to pay the old rate of 50 cents per hour for the men who were able to earn it, and for less capable men less wages. But the unions would not hear of it. Every man who belonged to the union had to have the same rate of pay per hour. In ceffet, what they demand is that the man be paid for his time and not for his work. They want to sell hours not labor. It is scarcely necessary to point out what a killing effect this has on capable and ambitious workmen. If the lazy or incompetent man is to be placed on an equality with the capable, industrious workman, what inducement is there for the latter to exert himself? It is certainly one of the most unfair and unreasonable propositions ever laid down, but it is quite in keeping with unionism. That the vast majority of the most capable workmen fight shy of the unions is not to be wondered at when one considers that unionism is antagonistic to capacity, in as much as all its effort is in the direction of securing for incompetency the rewards that justly belong to proficiency.

AS THE REIGN OF PROSPERITY BEGINS



HARD TIMES: "I think it's about time to get out of here."

The Stock Market.

SOME one has described the stock market as a business barometer. The manipulators of the market are said to have a species of second sight, or foresight, by which

they are able to detect disaster before it arrives, and discover an approaching boom in advance of ordinary mortals. Whether or not there is anything in this, certain it is that they discover every change in the business world in advance of its becoming effective. The great slump in the market last fall came well in advance of the depression in manufacturing and general trade. At the present time, while general trade has shown but slight improvement, the stock market is booming, which is taken to indicate that the sagacious brokers have already sighted returning prosperity on the approach.

A New Railway Rule.

THE Government is to be congratulated on the stand it has taken with regard to the granting or extending of railway charters. The Minister of Railways, Hon. G. P. Graham, announced in the Railway Committee of the House of Commons the other morning, that the day of granting charters to railways that did not do work was ended. This declaration was made during a discussion in the committee of the bill respecting the Manitoulin and North Shore Railway, which was ordered to expend $25,000 on the Manitoulin section before July 15 next, and at that date satisfy the Board of Railway Commissioners of its financial ability to complete the road within two years. This is a stand that should have been taken long ago with regard to railway charters, many of which were obtained for the sole purpose of speculation. There is still another important feature of railroading in this country on which the Government should take a stand, and that is in the matter of equipment. Once a road is built it should be refused any further charters either for the extension of the main line or for branches, until the portion covered by the original charter is thoroughly equipped. A road without sufficient rolling stock to handle its traffic promptly is worse than no road at all, for it shuts out other companies that would be glad of the opportunity to supply the service demanded by the traffic. In the past our manufacturers have had all kinds of difficulties in getting cars, and even when they did get the cars the delays in transit were often such as to entail serious losses. A company that is granted a charter, carrying as it does many special and valuable privileges, should be compelled to maintain a reasonable service, both for freight and passenger traffic. There should be some fixed standard of equipment, and it should be insisted on in every instance. Perhaps now that the Government has decided to wipe out one evil it will turn its attention to this other and find a remedy for it.

A Good Suggestion.

HON. J. D. ROLLAND, President of the Canadian Manufacturers' Association, in a recent interview at Halifax, threw out a suggestion to our friends down by the sea, which they would do well to take into their most serious consideration. The Maritime Provinces enjoy some advantages over the rest of Canada, which will eventually give them the importance in the Confederation of provinces to which their geographical position entitles them. Hon. Mr. Rolland struck the right note when he said: "Your natural resources should be developed, and I would like to see a great shipbuilding plant in your province. There is no reason why such an industry should not prosper with a little Government assistance at the outset. All the big steamers that go on the Great Lakes should be turned out of Canadian yards, instead of coming from other ports. I feel that the Manufacturers' Association would endorse any project for the establishment of steel ship building, and I think that the Province of Quebec would give it most hearty support." There is no reason why such an industry should not be a great success in the Maritime Provinces. In the days of the old wooden sailing vessels, the Maritime Provinces had their shipyards, and the prosperity that went with them. There is no reason why they should not have shipyards turning out steel vessels now that the other kind have gone out of fashion. They have everything that nature can give them to make such an enterprise a success, and if it were once undertaken it is safe to predict that the money needed would be forthcoming. "Made in Canada" steamships would find a hearty welcome from every part of the country.

The Pulp and Paper Problem.

WHAT has come to be known as the "Pulp Problem" is one of the most discussed questions in Canada to-day, and it is a satisfaction to note that the daily press is devoting so much attention to this important issue. From Washington recently came the information that assurances were given from a high source in Ottawa, that Canada would not put an export duty on pulpwood, if the United States removed the tariff against it entering that country. Senator Edwards, one of Canada's lumber kings and the owner of vast areas of pulp forests, as well as a leading member of the Liberal Party and a close friend of the present Government, in a recent interview said that it was his opinion that the best thing Canada could do would be to let matters drift along in their natural course without trying to improve them by legislation. The paper mills of the United States were getting old, he said, and as the raw material they had at home was fast approaching exhaustion, the chances were that the plants over there would not be replaced, but new ones built in Canada instead. Can it be possible that the Senator has been giving out this interview for the purpose of seeing how the people would receive a policy of inaction in order that the Government might be able to judge in advance whether they would resent its failure to protect their rights? If this was the object that he had in view he has had his answer from the country. He has been told pretty plainly that the people of this country fully understand the situation, and are in no doubt whatever as to the best means of forcing the manufacture of

our raw material into paper in our own country. The sooner the supply of Canadian pulpwood is stopped going to United States' mills, the sooner will their own forests be exhausted and the mills either forced to go out of business or move over here. So long as we continue to supply them with raw material they will remain where they are, but once we shut off the supply and their own is exhausted, they must come of necessity. There is nothing else to it.

One Reason for High Freight Rates.

THE Government has appointed a commission to investigate the charges made by Major A. S. Hodgins, C.E., a former district engineer in charge of a 400-mile section of the National Transcontinental Railway. Broadly put, the Major charges that millions of dollars are being wasted or stolen in the construction of the Government portion of the Grand Trunk Pacific. The accounts are padded and the Government are millions out on the transaction. This is a matter of very great importance to manufacturers who furnish the chief source of revenue to the railways. If a road costs more than it should cost, and interest has to be earned on capital that never actually went into it, the freight rates are bound to be higher than they should be. The chief argument that the advocates of the road used to get the bill through parliament was that it would give the West competition in freight rates, and would mean the movement of the western crops eastward, and of eastern manufactures needed by the farmers westward on more favorable terms than can now be obtained. If, however, the road is going to cost millions more than it should cost, the chances for any improvement in freight rates are very remote. It will be interesting to follow the investigation into Major Hodgins' charges.

A LARGE ISSUE



SIR WILFRID: "It's gaining in size and weight very fast."

Labor and the Law.

LABOR leaders are great advocates of legislative enactments which restrict the liberties of employers, and hamper them in dealing with their employees. When, however, the courts interpret an act in any way restricting the freedom of labor to coerce and hamper employers, they cry out at once and want to be exempted from its operation. In New York a couple of weeks ago a labor mass meeting, which was one of several held throughout the United States, was called for the purpose of publicly demanding that Congress pass a labor amendment to the Sherman Anti-Trust Law, which would exempt labor organizations from the provisions against combinations in restraint of trade. The judges of the Supreme Court of the United States had decided that the Anti-Trust Law was, as it should be, applicable to labor as well as to capital, and in what is known as the hatters' case they held organized labor to be a trust and a monopoly, and that its agreements were conspiracies. When decisions of this kind are handed down against large corporations, the unions applaud the wise and learned judges, but when they applied the same law to labor, they were described by Mr. Samuel Gompers, President of the American Federation of Labor, as behind the times, and their decision was declared to be unjust and unconstitutional, and Congress was told by the meeting that it was its duty to so amend the law as to remove any possibility of any such future constructions. The only way apparently of satisfying these gentlemen is to make two sets of laws—one for the employer, which must be harsh and ironbound, and another for labor, which must be elastic enough to be stretched to the utmost limit labor wants to go. Congress so far has refused to be stampeded by the labor leaders.

Steamship Bills of Lading.

MR. A. D. WATT, of the Allan Line of steamships, was heard recently before the Senate Committee on Banking and Commerce, with regard to steamship bills of lading. Asked by Sir Mackenzie Bowell why an ocean carrier should not be subject to the same liability for damage as was imposed on railways and all inland carriers, Mr. Watt replied that railways were common carriers, but that no nation in the world which had built up any tonnage had treated the ocean shipping company as a common carrier, but as a carrier by contract. Mr. Watt went on to tell what a very injurious thing it would be to Canadian shipping if the lines running out of Canada were forced to assume responsibilities for damages they might do to goods entrusted to them for carriage. He also stated that the United States was the only country that treated steamships as common carriers. This being the case, will Mr. Watt or someone else who is interested, enlighten us on how Canadian shipping could possibly be injured by passing an act that would give the shippers via Canadian ports the same guarantee against loss through bad handling as is enjoyed by shippers via a United States port? If the United States did not treat the steamship as a common carrier, there might be some grounds for his claim, but the Canadian line cannot possibly be hurt by being put on the same basis as the United States line, and surely the Canadian shipper is entitled to as much consideration as the shipper from United States ports. It seems to us that it would help rather than retard the business of our ports. To be sure the companies would have to handle goods entrusted to them with greater care, but as the companies are paid not merely to carry freight, but to carry it safely, this is no more than the shipper has a right to expect. Mr. Watt also explained that the reason the bill of lading specified that English laws should apply to damages under bills of lading was because the Canadian steamship companies wanted all actions under one system of laws and had, therefore, chosen England. Asked if he would have the shippers who have goods damaged go to England to recover damages, he replied that he would have damages assessed where damage could be seen, and he would not have the steamship companies compelled to go to Toronto, Chicago, Winnipeg, Kansas City and everywhere else on the continent to defend suits. All through his evidence Mr. Watt seemed to take the position that the only interest to be considered was the steamship company. Everything should be in its favor. As far as the shipper was concerned he could protect himself with insurance, and he would find it much easier to collect damages from insurance companies than from the shipping companies. In short, the whole tenor of Mr. Watt's argument was that the steamship companies should have a free hand to deal with the shipper as they saw fit, and if the latter suffered through the treatment he received he should have it so arranged that he could get satisfaction out of the insurance companies. The shipping companies are perfectly justified in taking this stand. They are in business to get the most they can out of it, but the business of Parliament is to see justice done, not to legalize jug-handled contracts for the particular benefit of one class at the expense of another class.

The Bonusing of Immigration.

THERE was a long discussion in Parliament a couple of weeks ago on the question of bonusing immigration. It was contended that the payment of a bonus to booking agents was really an inducement to them to ship out to Canada any and every kind of immigrant that they could induce to purchase a ticket, regardless of his fitness to become a good and useful citizen of this country. It was pointed out that of the three hundred and odd thousand who came to Canada last year, only twenty thousand were bonused, indicating that the bonus was not needed to induce people to come here. The thousands who came on their own account came with a purpose; the 20,000 who were bonused came because they were coaxed into coming. As between the immigrant who comes of his own accord, and the one who has to be specially induced at the public expense to come, the chances are all in favor of the former turning out the more desirable citizen. If the 20,000 specially induced immigrants were cut out, the voluntary additions to our population as indicated by the returns, would of themselves make a very respectable showing, and the country would be populated as fast as perhaps it is desirable it should be. The money which the government would save by abolishing the bonus system, which it is contended is no longer necessary, could be spent to much better advantage. It would, for instance, go a long way towards establishing technical training schools, where our mechanics would have an opportunity of acquiring that special knowledge without which they cannot hope to compete with the trained workmen of other countries. If this use for the money now spent on bringing in more people had been suggested to the government during the debate, perhaps they would have seen the advantage of the change, and turned the appropriation over for that purpose. All the critics did was to attack the expenditure, and the government decided to continue it.

Work for Thousands.

IT is announced that by July 1st the Grand Trunk Pacific will require at least nine thousand men on construction work. The C. P. R. will have probably as many more at work on their extensions and improvements, and all the other roads will add their share. With all these men drawing big pay all summer, and the crops promising better than they have at this season for years, the prospects for lively times this fall are certainly very bright. Merchants throughout the country who want to share in the good times that are so near at hand should get their orders in without delay. Held back orders do not improve the situation, and in the end mean a loss of trade to the merchant.

D. M. COUGHLIN.



Parliament Buildings, Ottawa

WHAT CANADA IS DOING TO EXTEND HER EXPORT TRADE

By F. C. T. O'Hara,
Acting Deputy Minister of Trade and Commerce.

The Department of Trade and Commerce at Ottawa can be of great assistance to manufacturers, through the work of trade commissioners. These representatives are in close touch with conditions in the various countries with which Canada does business. They will investigate the market for any class of goods on request

IT is a pleasure for me to comply with the request of INDUSTRIAL CANADA to contribute an article upon the facilities offered by the Department of Trade and Commerce to the business man of Canada. Too frequently the voice of the critic has been heard when for various good reasons it has not been expedient to reply. While fair criticism is and should be an incentive to greater efforts, many times it has been born of ignorance of the Department's labors, and has been discouraging to those who have made an honest attempt to improve its usefulness. Occasionally when a departure is made in untrodden paths and perhaps under extreme difficulties, the voice of the critic, to whom, perhaps, the idea had never occurred, is again leveled at the administration of the department for not having acted years before. To such criticism there is no reply.

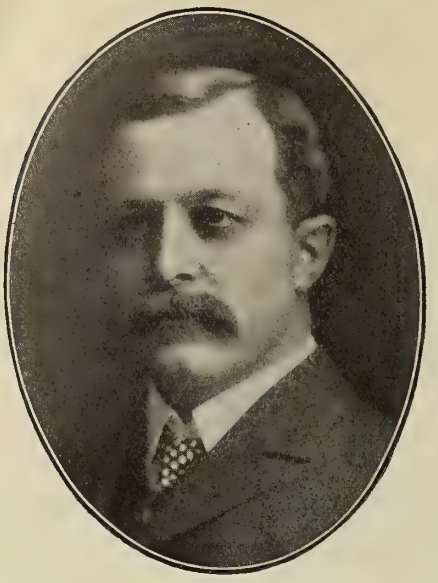
Before proceeding to deal directly with that part of the work of the Department more particularly defined in the name of Trade and Commerce, I may perhaps be permitted to refer briefly to the other important branches of the public service administered by the Department which necessarily must divide that time and attention which otherwise would be devoted to the extension of Canada's trade. The average business man has no idea of the work of the Department. He thinks it compiles trade statistics, answers trade enquiries and publishes reports from Trade Commissioners and there its work ends. But what are the facts?

Steamship Services.

The Department enters into nearly 60 contracts for steamship services, some wholly within Canada, others to British and foreign countries. Among the more important of the latter are services to Great Britain, France, South Africa, the West Indies, Mexico, Australia, New Zealand, China and Japan. The fulfillment of the terms of the contracts must be watched, the claims for subsidy checked and paid. A subsidized ship in some part of the world goes on the rocks, or misses some port of call, the company may be charged with discriminating in rates or a steamship fails to make the necessary speed, etc., etc. British or foreign governments in some instances pay a portion of some of the subsidies. Communication by letter or cable with some of them is therefore under way at all times. All these matters entail a large amount of correspondence and an expenditure on behalf of Canada during the year of over $1,000,000.

Inspection of Grain.

The Department administers the Act respecting the Inspection and Sale of Staple Commodities. This includes the inspection of hides and skins, pot and pearl ashes, flour, fish



D. P. Ross
Canadian Trade Commissioner, Melbourne, Australia.

and fish oils, hay, etc., etc., and lastly and of vast importance, that of grain. The chief inspector of grain, with headquarters at Winnipeg, and 125 other officials and employees of various grades, are engaged in this important work of grain inspection. The revenue from grain fees amounts in a year to over $100,000, and the expenditure for this service amounts to more than that sum annually. During the last crop year over 100,000,000 bushels of grain were inspected and no one with a knowledge of this service doubts that it will be a very short time before this quantity is trebled and quadrupled. This must be kept in mind at all times—anticipated, and preparations made to handle the great volume of grain which at no distant date will pour through the Gateway of the West—Winnipeg.

Rival Interests.

Meantime the rival interests must be considered—possible clashing must be rendered less likely. The farmer must get his grain to market, the elevators must fill and empty their bins with despatch, the railways must supply cars to both without undue favoriteism to either, the grain dealers must be able to buy and sell without restraint and unless the cogs move smoothly the banks cannot finance the situation and the fabric becomes lined with discord and harmful to the whole Dominion. Through the Inspection Act and the Manitoba Grain Act the Department of Trade and Commerce must grasp the problems which arise with each succeeding year—amending the Act where possible or refusing to make changes where they appear impracticable.

Chinese Immigration.

It is a far cry from matters of grain to the administration of the Chinese Immigration Act. A file containing a Chinese puzzle awaiting consideration may be side by side with a problem in the transportation of grain—both may involve instructions by wire to distant points of the Dominion.

During the fiscal year ended March 31st last, 2,197 Chinese entered Canada. Of these, 715 were exempt, and 1,482 had to pay Capitation Tax of $500 each. The revenue, therefore, from this source was $741,000. Refunds in many cases have to be made: Rumors of forged documents must be investigated: A railway must be penalized for permitting a Chinaman in transit to escape: A Chinaman is arrested for having smuggled himself into the country: A Chinaman may be in the Sarnia tunnel or on an international ferry refused admittance by the customs officials on both sides of the line: Is San Teek the wife of Hong Woy and therefore exempt from the payment of the capitation tax as the wife of a Chinese merchant? To say the least, the administration of the Chinese Act is interesting. The tax of $500 serves to increase the number of evasions and therefore requires increased vigilance.

Bounties.

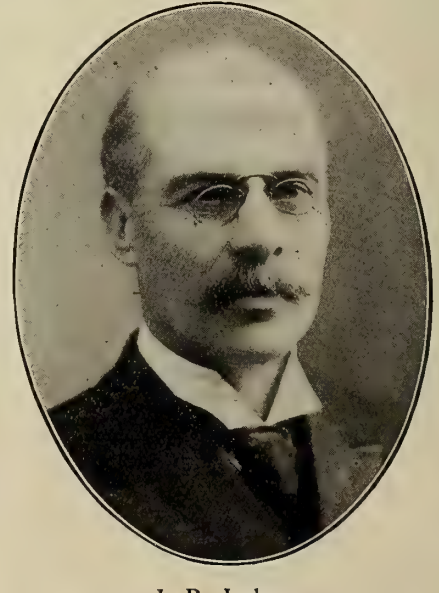
During the last twelve months the Department paid more than $2,000,000 in bounties on iron, steel, lead, crude petroleum and manilla fibre used in the manufacture of binder twine. Inspectors in all these articles are on the spot from British Columbia to Cape Breton and constant questions arise as to the manufacture of some of the articles and whether the claims made comply with the act. Progress, for instance, in the metallurgy of iron and steel were not anticipated in the Act, nor does it appear at times as if legislation can keep pace with the changes and improvements constantly introduced at the big iron and steel plants in Canada.

Facilities for Assisting Trade.

COMING to the question of the facilities offered by the Department to assist the commercial interests of Canada, it seems difficult to approach the subject with sufficient brevity to conform to the limited space of a magazine article. The Department has its limitations; but the writer claims that so far as systematic organization of the Department itself is concerned there is little to be desired. The staff at its disposal and the funds appropriated for the work are utilized to the greatest advantage. Not including the Minister, there are 19 persons only, 14 male and 5 female, engaged in the Department at Ottawa. They are all employed in the divers services administered by the Department. The total outside service numbers 207.

Publications.

The publications issued by the Department are the Annual and Monthly Reports, which contain principally trade statistics, and the Weekly Report, containing the reports of Trade Commissioners, Commercial Agents, and such other information as may be considered of sufficient importance to warrant speedy publication. All these are mailed free to applicants. Of the latter, 2,600 copies are mailed from Ottawa every Monday evening.



J. B. Jackson
Canadian Trade Commissioner, Leeds, Eng.

Special Statements.

Scarcely a day passes without a request for a special statement of statistics, which may not be clearly indicated in any of the trade publications of the Departments of Trade and Commerce or Customs. These are turned over to the Chief of the Statistical staff and the statement is prepared and forwarded by return mail.

Foreign Merchants.

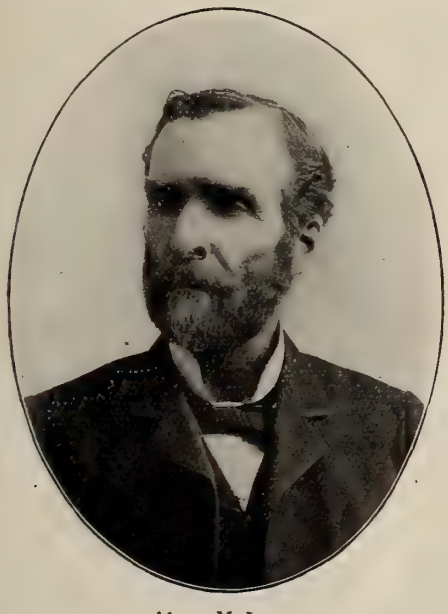
The Department is able to give correspondents by return mail the names and addresses of merchants and manufacturers of any commodity in every country in the world.

Trade Enquiries.

A card index is kept of every enquiry for Canadian goods which may be received from any part of the world. Complete lists of addresses of such enquiries can be forwarded to applicants by return mail. This feature, however, has not proved altogether a success, for the requirements of such foreign houses may be fulfilled and still their address remains on the departmental list, as in many instances they do not notify the Department until they write and ask that their address be removed from our list, as they have been "besieged with letters from Canada."

Value of Trade Enquiries.

To the ordinary man, and even to those possessing but a passive interest in the Canadian Trade Commissioner Service, the trade enquiries which appear in the Weekly Report of the Department of Trade and Commerce are of little value. They are regarded as an unknown quantity—a sort of outlet for an enquiry which it is too much trouble to answer, or a good way to get rid of a question which cannot be answered; it is a mere adjunct, they think, for many commercial publications. But those little trade enquiries begin a tremendous volume of correspondence with an ultimate value of hundreds of thousands of dollars—yes, in the aggregate, millions of dollars. Through them one commercial man informed the writer he had formed connections with an English firm which netted him profits of more than $2,000 a month for nearly three years. Only a few days ago the writer received an unsolicited letter stating that a certain firm had sold 20,000 gallons of cider through answering one of them; but these examples fade before the record of the number of trade enquiry addresses furnished Canadian correspondents by the Department. During the calendar year



Alex. McLean
Canadian Trade Commissioner, Yokohama, Japan



P. B. Ball
Canadian Trade Commissioner, Birmingham, Eng.

1907, 1816 trade enquiries were received, and 9,594 addresses were furnished applicants. Each enquiry, therefore, was sent out on an average of five times. Year after year these trade enquiries are increasing. Five years ago only 132 trade enquiry addresses were furnished applicants, so there must be business in them, and profits, too.

Trade Commissioner Service.

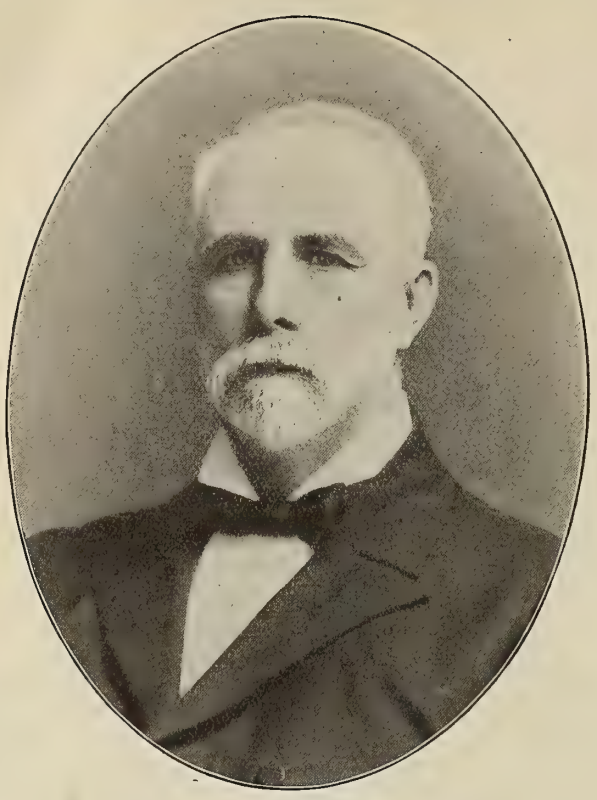
HUNDREDS of trade enquiries pass through the Department to-day with despatch where none were received only a few years ago. This, of course, is largely by reason of the extension of the Trade Commissioner Service. The writer can state with perfect truth that Canada has some good men in her Trade Commissioner Service. Some of them would do credit to any country in the world. It is true their work is not diplomatic, as that term generally implies, but does not the extension of a nation's trade lend itself to the highest possibilities and offer work to the keenest minds? In some instances the Canadian Trade Commissioners have been engaged in important matters of a semi-diplomatic nature, and have been recognized in a way identical to that recognition which any nation might accord to its highest official in a foreign country.

Canadians Only.

The writer believes that Canadians only should be appointed to this service. It is obvious that one who may have been born and brought up in Canada is eminently more fitted to represent Canada abroad, than another who may have even exceptional qualifications without being a native of Canada. A Canadian of reasonable intelligence is equipped for active and useful service the moment he enters upon his work in the foreign field. He knows his own country; he lives in and sees the other; he sees what it wants; he sees what it produces. No matter how well the foreigner may know his own country, how is he at a distance to gain a useful knowledge of Canada to enable him to be of service to her? He may make periodical visits to Canada—that will assist him—but as an all-round representative he is at a disadvantage. He can answer trade enquiries, but he will possess little or no initiative in the interests of Canadian business men. That is not the man Canada wants.

Information in Foreign Fields.

The Department's usefulness in obtaining information in foreign fields is not limited to those countries wherein a Canadian Trade Commissioner or Commercial Agent may be



J. S. Larke
Canadian Trade Commissioner, Sydney, Australia.

established. Correspondents are sometimes given the address of the British Consul, at the point where information is desired, or the Department communicates direct to that official, and in not one single instance has it ever come to the knowledge of the Department that the enquiry has not resulted in the most courteous reply with the fullest possible information. Special pains have been taken by the Department to provide the principal British Consuls in the United States with commercial and official publications from Canada, and in answer to a special enquiry some little time ago, with one voice they declared themselves always willing to assist Canadians in obtaining commercial information, but regretted that Canadians never called upon them nor communicated with them.

Foreign Trade Publications.

The Department has on file the trade publications and miscellaneous bulletins of almost every country in the world from which, for special purposes, information is readily obtainable and frequently of value.

Suggestions Welcome.

The Department welcomes suggestions. Some of those received are promptly put into operation, but many are of a hopelessly impractical nature and usually the Department is able to prove to the satisfaction of its correspondent the impossibilities attending his suggestion.

Unfair Criticism.

There is one great cause of frequent criticism of the Government and the Department. I refer to the fact that a far greater number of Canadian trade officials abroad are not appointed. Many people are too prone to hold up as a standard the accomplishments of the United States, a nation of eighty or ninety millions, and expect that a people of six millions can perform the same work, appoint huge staffs and spend the same number of millions of dollars. This is all forgotten, and because the United States can do these things the vapid corollary is that Canada should do the same.

Cost of U. S. Consular Service.

Canada has 13 Trade Commissioners and 5 Commercial Agents. The service costs, roughly, $70,000. The United States has 57 Consuls-General, 235 Consuls, and 341 Consular Agents. The total cost for the year ending June 30, 1907, was $1,777,635. But the most surprising statement is that the consular fees received for official services during that year amounted to $1,672,803, making the net cost of one of the finest consular or trade service in the world, $104,832. Business men well know that these fees are required to be paid to the U. S. Consuls in the country of shipment upon all goods destined to the United States—for consular certificates.

Internal Trade Statistics.

There is another point with reference to which certain criticism has been directed toward the Department of Trade and Commerce. I refer to the compilation of Internal Trade Statistics. Everyone concedes that it would be a most excellent feature. But those who advocate this idea have not considered the subject. They think it is done in the United States, but it is not done there to any considerable extent, but resting under the false impression that it is, the Department of Trade and Commerce is criticised for not performing this work in Canada, a work which the United States does not do with its millions of people, nor the Government of Great Britain, with its forty million. What some evidently have in mind is this: In recent years in the United States, certain Boards of Trade and Chambers of Commerce have gathered internal trade statistics. The United States Government has merely incorporated this information in its official reports.

Board of Trade Compilations.

The report more especially referred to is the Monthly Summary of Commerce and Finance of the United States. In this report there appears a special section known as the "Internal Commerce of the United States." In this section it will be found that nine-tenths of the so-called Internal Trade Statistics are gathered from Boards of Trade, Chambers of Commerce, Trade Journals, etc., etc., and the compilation credited to these various associations and publications. The collection of this information in Canada would be immensely expensive.



A. W. Donly
Canadian Trade Commissioner, Mexico City.

UNFAIR SWITCHING CHARGES.

THE right of railways to make a charge for interswitching is being contested by the Canadian Manufacturers' Association on behalf of shippers in various industrial centres of Canada. The principle on which the Association bases its claim is that a shipper is entitled to a through rate from the point of shipment to destination. The Railway Act provides that where a shipment to reach its destination has to pass over the tracks of two or more railways, the railways who join in the service may arrange for a through rate to cover the entire distance, a proportional amount going to each. Where such an arrangement is not reached, the Railway Commission is empowered to fix a rate. The system of through rates is now definitely established. It consists of less than the sum of the two local rates, and does not take into account any charge for transferring cars from the tracks of one railway to those of another. All rates include a consideration for the terminal work at the point of loading and unloading. There is none, however, for the transferring from one road to another. The railways, however, have set up an arbitrary claim for interswitching charges where the siding constituting the destination belongs to a railway other than the contracting carrier. This only applies to consignments which are made from non-competitive points. For instance, a manufacturer in Stratford, which is served only by the Grand Trunk, ships goods to a firm in Toronto, the firm having a C. P. R. siding into its plant. The Stratford shipper would be charged the regular freight rate from Stratford to Toronto plus a charge of five dollars a car, because the car had to be taken from the G. T. R. tracks and switched onto the C. P. R. siding. But if a manufacturer in some other city equi-distant from Toronto, but served by both railways, were to ship similar goods over the G. T. R. and also have them delivered onto the same C. P. R. siding at Toronto he would be charged the same freight rate, but would be exempt from payment of the switching charge.

This condition entails a double injustice. It discriminates against the shipper who has just one line of railway accessible, although the railways encourage manufacturers to establish their plants along their lines. It is unjust, also, from the fact that there is no essential difference between the cases where a switching charge is made, and where a through rate is granted. If a shipment is carried fifty miles along one line and is then handed over to another railway to carry thirty miles, there is no question about a through rate being granted. There is no charge for switching. But where a similar shipment is made and it is two miles to the siding of the second company an additional tax is levied. In either case the destination is specifically shown. The cars are to be taken from one point to some other point. Whether the use of a second road extends over two miles or twenty miles is immaterial to the principle. The total distance travelled is the sole point to be considered.

To quote from an argument before the State Commission of Wisconsin:

> We do not understand why the switching of a car for a mile or two miles within the incorporated limits of the city of Janesville, is not a transportation service just as much as the hauling of a car for a like distance between two stations in a regular freight train would be a transportation service. By transportation we mean the movement of a commodity or an article between two points not necessarily railway stations. That this service is performed by a switch engine and switching crew cannot change the fact that the article is transported. The service may be less expensive than if performed by a regular train crew, but this does not change the fact that the article is carried.

The railways in this matter have taken up an untenable position. It would seem as if they were making an effort to offset certain decreases in rates which they have been forced to grant, by tacking on an additional charge for handling. Even on their own contention that they are entitled to payment for the service rendered, they put themselves out of court by the extortionate amount of the charge. Terminals have to be provided and kept up if the railways are to do business. They are as necessary as rolling stock and stations. It would be as reasonable to ask a toll for car rental in addition to the freight charges as it is to say that an extra charge must be made to pay for the cost of terminals. In Peterborough, six dollars a car is charged for this service; in Toronto, five dollars. Shippers are looking for early relief from existing conditions.

PROPER MARKING OF FREIGHT PACKAGES.

LAST month INDUSTRIAL CANADA published, with comments of approval, a circular letter recently issued by the freight traffic department of the C. P. R., in which the necessity of properly marking packages was set forth. The advice cannot be repeated too often. Where packages are insufficiently marked there will undoubtedly be delay and perhaps loss. The additional handling and correspondence is an unfair burden to put upon the carriers and it results in an unsatisfactory service. The same subject is being discussed in the United States, and we quote from *The Railway Age* of a recent date:

It is officially announced that, effective July 1, all railways east of the Mississippi River operating in the territory covered by the "Official Classification" will refuse to receive for transportation all shipments in less than carload lots which are not plainly marked with the name of the consignee and the station, city and state of destination. For many years past it has been customary for a large number of shippers to mark their packages with an initial or some hieroglyphic, the key to which would be on the bill of lading. It was the theory that this saved time and also prevented competitors from observing the names of a shipper's customers on the outside of the packages.

Great abuses have resulted from this practice. When a large number of packages are intended for the same consignee, shippers often only mark one or two, the others having no marks at all. If the shipments become mixed with others at transfer points, there is no way of identifying them. The consequence has been great delay, vexation on the part of both shippers and consignees, and claims against the railroad.

The Pennsylvania Railroad, on its lines east of Pittsburg, last year paid $342,520 for claims for goods "lost in transit," an increase of 34 per cent. over 1906. Of this amount $176,260 was traced to the fact that shippers had marked their goods improperly. Likewise, during 1907, the Pennsylvania Railroad sent to its unclaimed freight station at Downington 18,000 packages on which there were no marks to enable the company to forward the freight to proper consignee and destination.

Some 416 railroads will participate in the enforcement of the new rule. The companies are to give very strict instructions to their agents, placards will be posted conspicuously in all stations, and every effort will be made to impress shippers with the importance of heeding the new rule. In fact, the campaign of education which is planned by the railroads along this line is almost unprecedented in its thoroughness. It is the belief of the carriers that the enforcement of the new rule will be of great value to the public in the removal of such a prolific source of delays and losses.



The Span ready to be carried across the French River *Photo by Gillespie*

MODERN BRIDGE CONSTRUCTION

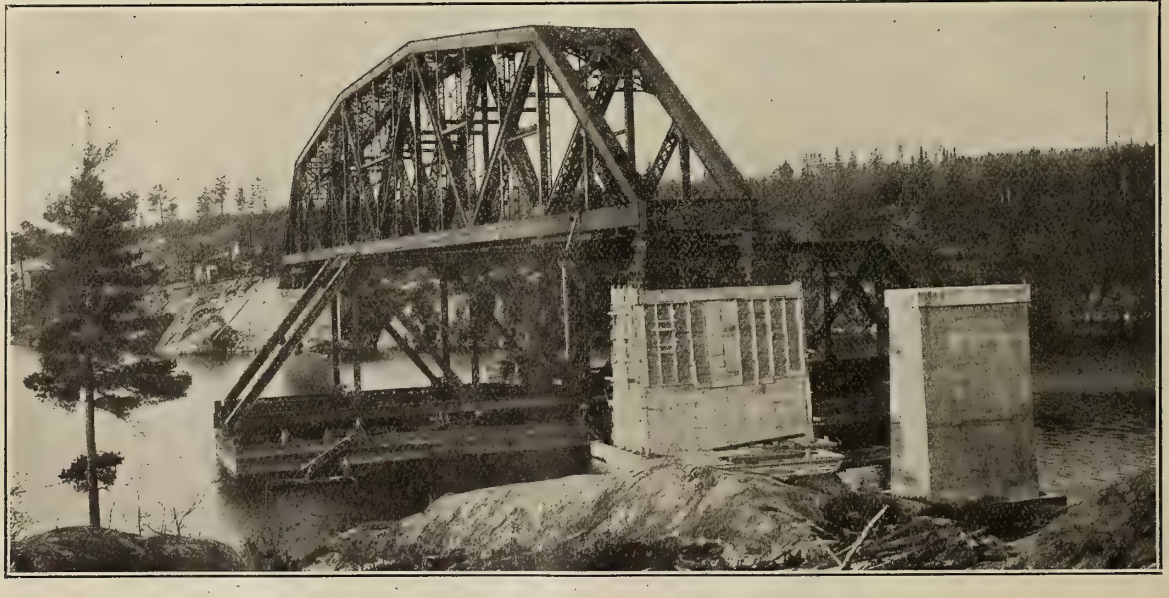
INDUSTRY has its difficulties and its triumphs no less than war. Day after day imagination and daring ingenuity and skill, which the public knows little of, are called into play. To the man who is carrying on his routine business or pursuing a methodical profession, the demands which are made on the intelligence and inventiveness of the engineer are little understood. Yet, at any moment, his work is likely to reveal some unforeseen difficulty, some unexpected condition, calling for new treatment and quick methods. The man on the job must be ready to unravel the knot, to meet new situations with new methods.

An interesting example of the adoption of novel methods for the accomplishment of a desired end is illustrated in the photographs reproduced herewith. The bridge over the French River shown in the cuts is an important engineering feat, having, as it does, the longest single track span in Canada, and indeed the longest and heaviest one ever erected and placed by the end launching method. It was erected by the Bridge Department of the Canadian Pacific Railway, and is located on a branch line of that railway about 43 miles south of Romford, Ont.

The peculiar condition which made difficult the erection of the bridge was the great depth of water in the main part of the river. For three-fifths of the crossing the water is 90 feet deep. In order to avoid the great expense of building a pier in the deep water, the first pier was built 415 feet south of the north abutment and a smaller one 67 feet south of this again. The width of the river is approximately 550 feet. Hence, an exceptionally wide span had to be thrown across from the north bank of the river to the first pier, 415 feet away.

The steel work was erected on the embankment. The construction was difficult, as some of the parts weighed as high as 40 tons. However, by means of derricks and cranes and other accessories the work was completed. In order that the scow, which was to be brought into use later, might be available, the span was built projecting out over the bank 103 feet. This end rested on the scow, which was specially built for the occasion.

When the assembling of the parts on the bank was completed, the work of getting the span in place began. The method of operation was to slide the whole structure along greased rails, out over the river. The scow in the meantime was supporting the projecting end and floating it over to the pier. Hydraulic jacks were used to launch the structure along the rails. The accompanying cuts show the span in various stages of the progress.



The Span carried across the River by a Scow and resting on pier *Photo by Gillespie*

HOW CAN THE COST OF PRODUCTION BE REDUCED?

As competition at home and abroad grows keener it becomes of increasing importance to bring the cost of production down to the minimum. The elements that enter into the cost of all products. Where economics may be introduced.

IN most cases a manufacturer has little control over the selling price of the articles he manufactures. Competition sets the mark on that. But the cost of production he does control, and the reduction of this cost to the minimum is the most important problem which he has to solve. Give two men equal opportunities and how often will one win a notable success, while the other drags on till failure overtakes him. One man, the world will say, was fortunate; luck was with him. But if the facts were closely scrutinized it would be discovered generally that whereas the two sold their products at the same price, one succeeded in producing his at a considerable percentage less than the other. In that lower cost of production rested his profit, his success.

Even among successful manufacturers, success is a matter of degree. Few are making great profits. Less still are making all that their business is capable of producing. It requires but a glance to see proofs of this. One man overhauls his system of fire insurance and, as a consequence, effects a reduction of hundreds of dollars annually on premium payments. Another institutes a new system for handling material whereby the wages of a number of men is saved. These are instances which we see in isolated cases. How many similar changes could be made in your plant? Yet every dollar so saved makes a reduction in the cost of production. It puts you in a better position to compete with your rival. It gives you just that much to work on.

A World Price.

The cost of production is of more vital importance now than it ever was before. Formerly Great Britain almost alone entered the markets of the world and contested with the local manufacturers for the trade offering. In some cases she succeeded in capturing the market. In others where conditions of manufacture or the supply of raw material was more favorable the local factory found a ready demand for all it could turn out. During recent years, however, industrialism has spread over the whole world, and every nation to a greater or less extent is not only striving for its own market, but is actively competing for foreign business. The natural result is that, making due allowance for customs tariffs, we are approximating more and more to a world price for goods. This, of course, is already the case in such products as wheat.

Two Essential Sources of Cost.

When the price is fixed, there are two elements which decide whether a nation or an individual will continue to exist as an industrial unit or not. One is a protective tariff; the other is the cheapness with which he can produce. A protective tariff puts all manufacturers of one line in a country on an equality, and will preserve the home market for the home factories if the duty is high enough to offset special advantages enjoyed by foreigners, such as cheap labor, longer hours of work, etc.

But among the manufacturers of a country there will always be competition and where the price is equal success must go to him who manufactures the cheapest.



The Span being carried out to Second Pier. *Photo by Gillespie*

The Saving of Bye-Products.

A few years ago gas works were operated for the manufacture of gas and for no other purpose. But the immense wastefulness of the process forced itself on the attention of some operators. It became a subject of study to discover some means of utilizing the bye-products which formerly brought no returns, but on the contrary cost money to have removed. To-day the whole cost of operation is met in some cases by the sale of these same bye-products. The ammonia has many uses; coke has a limitless market, even the cinders are turned into paving material. Another noticeable instance of economical methods is found in the meat packing houses. The age of wastefulness has passed. Small volume with large profits has given place to large volume with a slender margin of profit. That is the lesson which has been taught by the amalgamations and absorptions of recent times, which have tended to favor the big manufacturer at the expense of the smaller one.

Where Economies Must be Made.

Four elements, roughly speaking, go to make up the cost of any article, whether it be an axe or an automobile. These are raw material, labor, overhead expenses, and opera-

ting expenses. These vary greatly in importance for different manufactures, but they are always present. It becomes a question, then, how each of all of these elements in the total cost can be reduced. It is a truism to say that the raw material must be bought right. Yet the man who knows this perfectly well frequently fails to organize his buying department so as to be sure of getting the best prices. A proper system will show what has been paid for similar material in the past; it will show, also, where it was procured and such other details as will place the buyer in complete touch with the situation. Not only that, but the quantities bought will be shown. Can better terms be secured by buying in larger quantities? Does the consumption justify such an increase?

Waste must be eliminated wherever it occurs. Stock should go into a stock-room as soon as it enters the factory. A record of it should be taken by the stock-keeper and he should be made responsible for all that he receives. This is of prime importance. It means everything to get started right. The stock-keeper's card shows that Department A received ten of a certain article. It is up to Department A to show where the ten were used. A system which follows up stock carefully will soon induce a habit of care and economy in the foremen. When they get to know that they will be expected to account for what material they draw out of stock, there will be less waste by workmen and fewer things lost.

The Efficiency of Labor.

The cost of an article has a close relationship to the efficiency of labor. Nothing but a mere indication of the breadth of this subject is permissible here. The time that a man works is not of so much importance to the employer as the amount he accomplishes. In few cases does the employer feel that he is getting the best service of which he is capable out of a workman. How to improve this condition is worthy of the consideration of all manufacturers. The conflict between capital and labor has been accepted by many as an unfortunate but necesary evil. Such is a cynical view to take. It is one of the trite phrases which are tossed backward and forward between disputants so often that they come to have the force of maxims. No one but a pessimist is yet ready to admit that a sympathetic relationship is impossible between employer and employee.

But aside from this, much can be done to increase the efficiency, or in other words to decrease the cost of labor. It rests with the foreman to see that the work is properly organized, that there is no delay between the completion of one job and the starting of another, that a high-priced man is not doing work that could be done just as well by a boy, which depends on the foreman. He can run his department economically or extravagantly. Only by a good shop system can his work be checked up accurately.

Then there are the possibilities for economy in the cost of power, in the facilities for transportation, in the judicious laying out of the factory, etc. Would it decrease the cost of production to install a sprinkler system and thus save on insurance charges?

These are all phases of one great question. INDUSTRIAL CANADA will publish in succeeding numbers articles taking up the various points in detail.

A LESSON IN MUNICIPAL CONTROL

WHEN Chicago invited an eminent Glasgow authority on municipally-owned street railways to investigate the local condition and give a report on it, general surprise was expressed at the result. It was known that the expert was strongly in favor of municipal ownership. Yet his report came out uncompromisingly against the system for Chicago. The people were not in a position to operate a system to advantage. Political methods were of such a kind that successful management of a utility like the street cars would be impossible. The system would become immensely expensive and at the same time it would suffer in efficiency. Such in brief were the criticisms.

Now Cleveland has been experimenting with municipal control and the results, after a few short weeks, are not such as to encourage other cities to follow her example. The car system of Cleveland came under municipal control as a result of a long fight by Mayor Tom L. Johnson, to secure a three-cent fare. It may be added that it is the only city in the United States which operates its own cars.

The inauguration of the new system was celebrated by suitable festivities, and the gala-day was made notable by granting free rides for twenty-four hours. Everything was auspicious. But it was soon shown that industrial peace was not among the gifts contained in the pandora's box of municipal ownership. Before the sound of the acclamations at the dawn of the new era had died away, the angry demands of the workmen for more money arose. The workmen had votes and their employers were elected by themselves and their fellows. The unions naturally assumed that the city corporation would yield to their importunities. When their demands were refused, a strike was declared.

The situation was novel. Strikes against private corporations had been numerous. But here we have a small section of the people trying to extort from the people at large pay in excess of what the work had formerly brought and out of proportion to what similar work was then bringing. When the people refused to accede to the greedy demands, the workmen resorted to violence and much public property was destroyed.

Although the strike is still on, the city has succeeded in restoring a fair service throughout the city. The question will arise in the minds of students of economics, what would have been the results had there been in effect a general system of municipal ownership such as is advocated by Socialists? What would have happened had the street car employees been able to buy the support of the workmen in other lines by pledging them reciprocal support when their turn came to hold up the city council? The experiment in Cleveland is not without its lesson.

Alcohol from Peat.

A Copenhagen Company declare that they have developed a process for extracting alcohol from peat. By this process it is said that from one ton of dry peat 165 quarts of alcohol may be produced, besides 66 pounds of sulphate of ammonia. The company, which has been experimenting for two years, place the cost of alcohol, made in this way, at ten cents per gallon, which is much below the price at which the product can be derived from potatoes.

Canada will be much interested in this statement, for a double reason. We have extensive peat beds, scattered widely over the country. Hitherto there has been considerable difficulty in working them to advantage. The problem of pressing out the moisture, so as to make peat serviceable as a fuel, has proved almost unsurmountable. However, if it becomes possible to make alcohol from it cheaply enough to make it a commercial possibility as a fuel, its value will be assured. Alcohol can be used for most of the purposes for which gasoline and petroleum are now used. The production of it in large quantities and at low rates in this country would be a great stimulus to industry.

THE WHEELS OF INDUSTRY



A typical scene in Western Canada, showing a delivery of farm implements.



A scene of activity in the St. John, N.B., Harbor.

WESTERN CANADA'S WIRE FENCE INDUSTRY

What the Western Market means to the Manufacturers of Canada. The biggest order ever placed on the American Continent. The area to be fenced.

WITH the spring opening of the wire fencing trade in Western Canada comes the announcement from Winnipeg that one of the six factories operating in that city has booked a single order for the fencing in of the tract of land set aside in the Province of Alberta by the Dominion Government as a Buffalo Park reserve, containing 2,600 acres. The contract calls for 72 miles of special woven fence 86 inches high, that will weigh twenty-five pounds to the rod and is the heaviest fence ever manufactured in Canada, the contract price is $1,000 per mile. Another of the Winnipeg wire fence industries has entered into a contract with a large jobber there to supply 50 tons of wire fence product per day for the season of 1908. The Grand Trunk Pacific Railway Company have placed an order with an Eastern Canada wire fence manufacturer for 2,000 miles of fence, this being the largest single contract for fencing ever placed on the American continent.



Corner in a shipping yard of one of the six fence factories operating at Winnipeg

The demand for wire fencing is keeping the factories working at high pressure, the season has opened six weeks earlier this year, and those who are engaged in the trade are of the opinion that this year's output will surpass that of former years.

An Attractive Market.

In 1906 the five wholesale hardware jobbing houses of Winnipeg handled 1,100 cars of barbed wire, exceeding in value the sum of $500,000. In the same year the four factories then manufacturing consumed 600 cars of coil and woven wire in their manufacturing establishments.

In the three provinces of Manitoba, Saskatchewan and Alberta there are 357,016,778 acres of land, and of this land at least one-half, or 178,508,389 acres, is good for farming. Of this vast quantity of productive soil, the comparatively insignificant area of 8,327,970 acres, or less than one-twentieth, has been brought under cultivation, an amount so comparatively small beside that which remains for the work of the farmer to fence and convert into fields of growing grain and pastures, where herds of cattle and sheep shall outline and make rich the country in which they live.

Those who have not studied the problem of fencing in such a vast area of land as Western Canada contains have yet to realize what can be absorbed in the way of material in this important industry at Winnipeg. The average travelling business man who has the opportunity of going through a Winnipeg warehouse at this season of the year and see the enormous stacks of wire piled from ceiling to floor on every flat can readily understand why wire fence factories are being established in Western Canada.

OBJECT TO NEW SYSTEM.

The Montreal Board of Trade have protested to the Department against the rule recently put in force in the Customs House whereby refunds are being paid in cash instead of by cheque, as was formerly the case. The new system, it is held, places an unnecessary temptation in the way of the young clerks who are usually entrusted with this work. Representations will be made to the Minister of Customs to have the old system restored.



Part of the fence which will encircle the big buffalo reserve.

AMONG THE INDUSTRIES

Montreal will spend $30,000 on rebuilding a fire station.

The Peterboro Cereal Co. suffered a loss by fire recently.

Dundas will vote on a by-law to raise $16,000 for a new high school.

J. H. Hall & Co., of Brantford, Ont., will erect a new plant in that city.

Plans are being prepared for a new armory in Montreal, to cost $90,000.

H. H. Crossman has established a paint factory at Charlottetown, P.E.I.

An apartment house will be erected on Jarvis St., Toronto, at a cost of $250,000.

The Waterman Pen Co. will erect a $50,000 factory in St. Lambert, Que., this summer.

An electric light plant, to cost $25,000, will be installed at Ladysmith, B.C., this summer.

Geo. White & Sons will erect a $15,000 addition to their plant in London this summer.

Ottawa will spend $50,000 this summer on extending and improving its waterworks plant.

A bonus of $2,000 has been granted by Oil Springs, Ont., for the establishment of a flax mill.

A. Corrie, architect, Nelson, B.C., has prepared plans for a new school building for that city.

Taylor & Jamieson, of Scotstown, Que., will rebuild their saw mill, which was destroyed by fire.

Ville Marie, P.Q., will put in a waterworks and sewage system this summer at a cost of $27,000.

The Canadian Packing Co. have been incorporated. Head office, London. E. Richnitzer is a director.

It is reported that the Pease Furnace Co. is considering the establishment of a branch in Port Arthur.

W. T. Glover Manufacturing Co., Ltd., Burlington, Ont., have been incorporated, with a capital of $20,000.

The Massey-Harris Co. will erect a four storey warehouse at the corner of King and Strachan Sts., Toronto.

The Crown Lithographing Co. have been incorporated. Head office, Ottawa. A Smith, Ottawa, is solicitor.

W. T. Croker, of Detroit, Mich., is negotiating with the town council of Galt, with a view to erecting an automobile factory there.

Port Arthur, Ont., is considering the erection of a city hall, to cost $150,000. A by-law will be submitted to the people providing for the funds.

Tenders have been called for the erection of a grain elevator at Fort William. The capacity will be 2,000,000 bushels.

The town of St. Mary's, Ont., will make a loan of $20,000 to the Smallware Manufacturing Co., who are locating there.

The plant and building of the Victoria Brick Co., Victoria, B.C., were destroyed by fire. The loss is estimated at $10,000.

Wm. and J. G. Greey, mill builders, Toronto, suffered loss by fire to the extent of $1,500. The loss was covered by insurance.

Field Bros., of Victoria, have purchased an extensive timber limit on which a large saw mill may be erected this summer.

The Troy Chemical Co. have been incorporated, with a capital of $40,000, and head office at Toronto. G. M. Kelly is solicitor.

A company of Scotch capitalists have purchased a site in Toronto on which to erect a factory to manufacture thread and cordage.

Huntsville Hardware, Limited, have been incorporated. Head office, Huntsville, Ont.; capital, $40,000. J. W. White is a director.

A fire in Toronto recently did $175,000 damage to the plant and building of J. J. Zock Co., Jones & Moore, and the Canadian Silk Co.

The North Port Canning Co. have been incorporated. Head office, North Port, Ont.; capital, $40,000. A. N. Sprague is a director.

A new company has been organized to develop coal areas in Nova Scotia. Dr. Rugo Von Hagen, of New York, is head of the company.

An engineering and mechanical building will be erected in Winnipeg, as an adjunct to the Manitoba Agricultural College buildings.

The American Cyanide Co. will establish a large factory at Niagara Falls. F. A. Washburn, of New York, is President of the company.

Purity Castile Soap, Ltd., have been incorporated, with a capital of $100,000, head office, Toronto. W. M. Hall, Toronto is solicitor.

Quality Beds, Limited, Welland, have experienced no depression in trade. They have decided to double the capacity of their plant in that town.

The McLaughlin Co.'s mills, at Buctouche, N.S., were completely destroyed by fire recently. The loss was about $50,000, with only $12,500 insurance.

The pipe shop of the Dominion Iron & Steel Co.'s plant was destroyed by fire recently.: The machinery was ruined The shop will be rebuilt at once.

Grocers Supplies, Ltd., have been incorporated as manufacturing grocers, with capital of $40,000, and head office at Toronto. G. H. Kilmer is solicitor.

The Mail Job Printing Co. have commenced building operations on an office and warehouse building, corner of Duncan and Adelaide Sts., Toronto.

Scotland Box Manufacturing Co. have been incorporated, with a capital of $40,000, and head office, township of Oakland, Ont. J. E. Elliott is a director.

A scheme is on foot to establish a condensed cream factory, with local capital, at Chilliwack, B.C. Mr. Fredenhagen, of the Mount Vernon Condensed Cream Co., is the organizer.

Tantallon, Sask., may have a new industry in the form of a brick-making plant. A. R. Fleming, of Regina, is considering such a project, with an expenditure of $10,000.

Robertson & Hackett's sash and door factory, Vancouver, B.C., was destroyed by fire recently. The loss was $35,000.

The Guardian Shoe Co. have been incorporated. Head office, Montreal; capital, $40,000. Benj. Gale is a director.

The Regina Flour Mills Company's plant, which was destroyed by fire, will be replaced by a mill with a capacity of 500 barrels of flour and 100 barrels of oatmeal.

It is reported that the Bell Telephone Co. will erect a building in Toronto to accommodate their main exchange and their officers. The cost is estimated at $250,000.

Negotiations are progressing for the establishment of the plant of the British-Canadian Smelters, Ltd., at Chippewa, Ont. The ratepayers have decided by vote to grant a free site.

A financier of Montreal is advocating the formation of a Canadian Steel Company, on the lines of the United States Steel Corporation, to take over the principal steel companies of Canada.

The Western Stone Company has been incorporated, with a capital of $40,000, and head office in Winnipeg. J. Beaucage, W. H. Carter, and J. E. Robertson, all of Winnipeg, are provisional directors.

The Imperial Trust Co. will erect a $600,000 office building in Vancouver. Tenders will be called for in August. The entire steel frame will be encased with fireproofing and structural concrete.

A bonus of $5,000, with exemption from taxes for ten years, has been granted by the city of Sherbrooke, Que., to the Improved Paper Machinery Co., of Nashua, N.H., who will establish a plant.

A. T. Hunter, of Regina, has succeeded in interesting capital in a flour mill for that city. It will have an initial capacity of five hundred barrels a day, with provision for doubling this if necessary.

The American Can Company, of New York, have absorbed the business of the Acme Can Company, Montreal, of which Messrs. Jas. B. Campbell and Wm. Pratt are the owners. The American Company own and operate fifty-one factories in the United States, and have offices in New York, Baltimore, Chicago and San Francisco.

The Victoria Brick Co., who suffered severely by fire recently, will rebuild their plant at Victoria, B.C. Machinery has already been ordered and it is expected that the plant will be in operation in a couple of weeks.

R. B. Smith, of Oromocto, N.B., has erected a large saw mill at that place. The equipment consists of 100 h.p. tubular boiler, a 100 h.p. engine, No. 4 rotary mill, gang edger and lath mill, supplied by the Robb Engineering Co., Amherst, N.S.

The property of the Canada Cabinet Co., Ltd., which is in liquidation, was offered for sale by public auction on Thursday, by Mr. E. M. Hiscocks, auctioneer. The reserve price fixed by the Inspectors was not reached, so the property was withdrawn from sale.

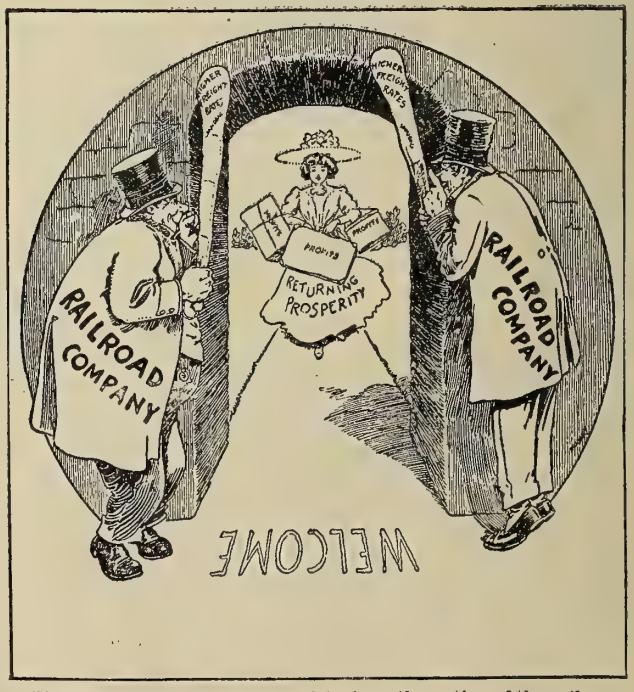
The Consolidated Lithographing and Manufacturing Co., Montreal, have purchased the business of the Canada Engraving and Lithographing Co., Ltd., the Union Card and Paper Co., Ltd., and Cameras, Ltd. Considerable additions have been made to the buildings and plant.

The Mount Royal Spinning Co., Ltd., mill, at Cote St. Paul, Que., has been completed and manufacturing will commence in July. The mill, when the machinery is completely installed, will contain 50,000 spindles and 1,200 looms, and employ in the neighborhood of 750 hands.

The Reid Foundry and Machine Company, of Ingersoll, will commence operations as soon as their building has been remodeled and the plant installed. The new company will take over the business of the Ingersoll Foundry Co. David Reid, formerly with the Westinghouse Co., Hamilton, will manage the shop.

The main building of the Imperial Stove Works, Morrisburg, Ont., was destroyed by fire recently. All the machinery in the polishing room, nickling and mounting rooms, and carpenter shop, was completely destroyed; only the foundry office, fixtures and papers were saved. The loss is fully covered by insurance. About fifty men will be out of employment, although it is said the work of rebuilding will be commenced at once.

THE RECEPTION COMMITTEE.



How the United States cartoonist views the action of the railways in advancing freight rates under present conditions. Bradley in *Chicago News*.

Fairview, B.C., will have a new normal school, to cost $50,000.

Markdale, Ont., will install a waterworks system, at a cost of $20,000.

The town of Taber, Alta., will install a waterworks system this summer.

Portage La Prairie will spend $50,000 on an auxiliary waterworks system.

A. Todd, of Walkerton, will erect a saw mill in Guelph. A site has been secured.

A by-law was recently carried in Winnipeg to expend $600,000 on new school buildings.

The Dr. Slocum Chemical Co. will erect a factory and office building in Toronto, at a cost of $30,000.

Additions will be made to the plant of the Imperial Wire and Steel Co., at Collingwood, Ont., this summer.

The Nova Scotia Telephone Co. will make extensions and improvements to their system which will cost $200,000.

The C. P. R. have decided to erect a steel bridge over the river at Red Deer, Alta. The estimated cost is $57,000.

The washing plant of the Dominion Coal Co., which was destroyed by fire at Glace Bay, N.S., recently, will be rebuilt.

A large pulp and paper mill is to be erected at the mouth of the Clowholm River by the British Columbia Wood Pulp and Paper Co., of Vancouver, providing that they can obtain a record for the water required to generate the power for their plant.

It is reported from Sandwich, Ont., that a pulp mill will be erected near there at a cost of $500,000, providing the United States Congress removes the import duty on pulp. F. T. Ranney, of the Detroit Real Estate Exchange, and R. Loveland, of the Saginaw Salt and Timber Co., are interested in the proposition.

Messrs. J. D. Whipple, Henry F. Dalley and Dr. C. O. Robinson, of Omaha, Neb., have organized a horse collar stock company, with headquarters in Hamilton, and will open a factory in the old Gompf brewery for the manufacture of horse collars for the Canadian trade. It is expected that this will give employment to about 25 hands.

The Canadian Crocker-Wheeler Co. has been organized to manufacture in Canada the products of the Crocker-Wheeler Co., of Ampere, N.J. The head office of the new company is in the Street Railway Chambers, Place d'Armes Hill, Montreal. F. E. Lovell, President of the new company, is a member of the lumbering firm of H. Lovell and Sons, Coaticooke, Quebec.

The Canadian Antimony Co., Ltd., incorporated last year with a capital of $250,000, is planning within the next few months to start up an extensive development of the antimony mines at Lake George, York County, N.B., which they recently bought from the old New Brunswick Antimony Company, which some years ago operated them. It is the intention of the company to install a ten drill air compressor and a concentrator to concentrate low grade ore. The company does not intend operating a smelter.

EMPLOYERS' ASSOCIATION DINNER.

A successful dinner was given by the Toronto Employers' Association on May 19th, at which Mr. Sayle, of Cleveland, was the chief guest. McConkey's was the scene of the festivities and nothing was left undone to make the occasion enjoyable. The menu was good; the musical programme was well arranged and excellently rendered, and the address of Mr. Sayle was a fine presentment of an important subject. Mr. Sam Harris presided and with him at the head table, besides Mr. Sayle, were a number of men who are most prominent as employers of labor in Toronto.

The subject of Mr. Sayle's address was technical education. No other problem of industrial life would have brought out such a large and interested gathering. Mr. Sayle, after speaking of the increasing need for industrial training, reviewed the work which was being done in various trade schools and technical institutes in the United States. Of these the most striking example was the Winono Institute. Here the boys received theoretical and technical instruction while working under the actual conditions obtaining in the shops into which they would later graduate. The equipment and method of operation as explained by the speaker were models.

Mr. Sayle was thanked heartily at the conclusion of his address for his courtesy in coming to Toronto as the guest of the Employers' Association.

WILL INTEREST BRITISH CAPITAL.

In a recent issue of Britannia, a paper widely circulated in Great Britain, Mr. C. F. Just has an excellent article on Canada, from the industrial standpoint. Mr. Just gives an adequate outline of Canada's early progress and later development, and sets forth in a convincing manner the special reasons why the country is suitable for the investment of British capital. We in Canada do not need to be told these facts. We have grown up with them. But with the British public taking the interest in Canada which is manifested in the migrations of recent years, such information as is given in Mr. Just's article is most timely. We credit the Mother Country with an appreciation of our wheat lands. That our cattle are known is shown by the fear of competition with them which brings about the restrictions about killing them upon entry. We are not so sure, however, that our other resources, our market, our manufacturing facilities, are recognized as they should be, and as they are being recognized by capitalists of other countries.

The signs are favorable for a fuller appreciation, however. The party of British journalists who toured Canada last year have contributed many hundreds of columns of reading matter for the British reader. Mr. Richard Grigg, who spent almost a year in the country as the Commissioner of the British Board of Trade, has reported in a way that must stir up the interest of British merchants and manufacturers. Mr. Just, in his present article, has added much to the general campaign of publicity. The result should be the turning of the tide of British gold from the United States to the younger country with its development still in the growing stage.

EXPERT SOAP MAKER.

Young Englishman with a thorough technical training in the manufacture of soaps, oils and kindred products is anxious to come to Canada and secure a position with a good Canadian firm in this capacity. Splendid testimonials and should make a good man for a Canadian firm. Original letters and testimonials can be seen at this office.

TRADE ENQUIRIES

NOTE.—For further information regarding any inquiry mentioned under this heading or the names of inquiries, apply by numbers to the Secretary, at Toronto.

671 **Agent.**—Gentleman. Thirty years of age, ten years' connection in **United Kingdom** best wholesale and retail grocers and provision merchants, is open to negotiate with principals for agencies or sole representation and is prepared to share expenses out for interview, highest references, has experience in organizing and advertising.

672 **Agents.**—A **London** firm desires to be placed in communication with Canadian firms who might be prepared to appoint them as agents for the sale or purchase of produce, etc. They are also desirous of importing consignments of mica from Canada.

673 **Agent.**—A commission agent claiming to have a good connection with the best wholesale and retail grocers and provision merchants in the counties of **Yorkshire, Derbyshire, Nottinghamshire** and **Lincolnshire,** desires to hear from Canadian exporters of produce who might like to avail themselves of his services.

674 **Agents.**—A **London** firm desires to be placed in communication with Canadian exporters of asbestos (crude and fibre), and also of mica, who may desire representation in the United Kingdom.

675 **Agent.**—A firm in **Paris,** possessing an established commercial organization, would be pleased to act as sole agent for **France, Algeria and Belgium** for Canadian manufacturers and shippers of produce who wish to develop business in those markets. An opening for canned lobsters especially indicated.

676 **Agency.**—A **London** firm desires to hear from Canadian exporters of produce to this country (mining products, cereals, etc.). They are also anxious to take up the buying agency for Canadian firms desiring such services.

677 **Agency.**—A firm of commission agents at **Rangoon, Burmah,** wishes to hear from Canadian exporters of produce who may wish to be represented there.

678 **Agency.**—A **London** firm of general merchants wishes to secure the agency for the United Kingdom of some Canadian produce exporters.

679 **Agency.**—An **Egyptian** firm desires to secure the agency of Canadian firms manufacturing goods suitable for sale in Egypt.

680 **Agricultural Implements.**—A **Manchester** firm wishes to correspond with Canadian manufacturers of agricultural implements.

681 **Asbestos Millboard.**—A **Manchester** firm asks for samples and prices of asbestos millboard from Canadian exporters.

682 **Apples.**—A firm in **Amsterdam** desires to be placed in touch with Canadian exporters of dried and evaporated apples.

683 **Barrel Hoops.**—A firm of commission merchants in **Hull, England,** can dispose of shipments of elm, ash, or other wood hoops for barrels, 5½ and 6½ feet in circumference and shipped thirty to the bundle.

684 **Boards.**—A **Lancashire** firm asks for samples and prices of grey boards and wood pulp boards from Canadian manufacturers.

685 **Boards.**—A **Manchester** firm asks for samples and prices of wood pulp boards from Canadian manufacturers.

686 **Boots, Shoes, etc.**—A firm in **Kingston, Jamaica,** desires correspondence with manufacturers of the following articles in Canada: Boots and shoes, tweeds and serges, corsets, soap and perfumery, confectionery.

687 **British Representative.**—Young Englishman with considerable business experience in **Great Britain** and United States, where he at present holds a good position, is anxious to return to Great Britain as a representative of a first-class Canadian firm. Satisfactory references.

688 **British Representative.**—Englishman of many year's business experience who has lived in Canada for the past few years, is anxious to return to Great Britain as the representative of a good Canadian firm. Claims good connection and has references.

689 **Broom Handles, etc.—Dublin, Ireland,** wholesale merchant desires quotations on from 20 to 500 gross lots of broom handles from Canadian exporters. Delivery to be included to Liverpool. Will purchase, paying cash on approval.

690 **Broom Squares.**—A timber importing firm would like to hear from Canadian shippers of broom-handle squares with prices c.i.f. Hull.

691 **Calcium Carbide.**—Havana, Cuba, firm inquire for Canadian manufacturers of this material who could export to Cuba.

692 **Canned Fruit and Canned Meats.**—A grocery firm in **Barbados** invites correspondence with Canadian firms putting up canned fruit and canned meats.

693 **Canned Goods.**—A **London** firm, well known in the trade, desires to hear from Canadian exporters of canned goods to the United Kingdom.

694 **Chairs.**—A **Barbados** firm wishes catalogues from manufacturers of cheap lines of chairs:

695 **Cheddar Cheese.**—A **South African** firm of wholesale general merchants desire to be placed in communication with Canadian manufacturers and exporters of cheddar cheese.

696 **Commission Agents.**—A **London** firm of Colonial and Foreign brokers and commission agents desires to get into touch with Canadian firms who might like to avail themselves of such service as they are in a position to render.

697 **Cow Hair.**—A merchant firm in the North of England desires to hear from Canadian shippers of white or brown washed cow hair for manufacturing purposes: Samples invited and prices for shipments, either c.i.f: Hull, Manchester or Liverpool.

698 **Condensed Milk.**—A firm of importers in the North of England will consider a sample tin of sweetened condensed milk, with lowest prices, from Canadian producers, which commodity they at present import in ½-ton lots of 28-lb. tins.

699 **Crushed Oats, Etc.**—A South African firm of wholesale general merchants desire to be placed in communication with Canadian exporters of crushed oats in bags, and Quaker oats.

700 **Dried Fruits.**—An old-established Leeds firm of produce importers would like to have samples and prices from Canadian exporters of dried fruits.

701 **Egg Case Fillers.**—Well-known **British Columbia** firm desires quotations on car-load and less lots of egg case fillers, including flats, from eastern firms. Member of C. M. A.

702 **Engineering Goods.**—A well-connected firm of engineers' agents will welcome catalogues and price lists from Canadian manufacturers of machinery, engineering goods or specialties, seeking an export trade with the North of England.

703 **Evaporated Fruit.**—An established merchant in the port of Hull is inquiring for Canadian exporters of evaporated apples, pears and other fruit.

704 **Corsets, Parasols, Etc.**—A merchant in **Bridgetown, Barbados,** desires to open correspondence with manufacturers of corsets and parasols in Canada.

705 **Fine Flour.**—A well-connected merchant has made inquiry respecting the agency in Leeds and district for a Canadian flour mill exporting fine flour. Samples and full particulars as to trade terms requested.

706 **Flour.**—A firm in **Port-of-Spain, Trinidad,** invites correspondence with Canadian millers with a view of business.

707 **Fruits and Vegetables.**—A London firm with branches in Manchester and Liverpool invites correspondence from Canadian canners of fruits and vegetables.

708 **Furniture.**—A South African firm of manufacturers' agents desire to be placed in communication with Canadian manufacturers of furniture, especially the cheap, fancy class, such as tables, writing desks, whatnots, chairs, etc. Prices to be quoted f.o.b. at Canadian ports and also c.i.f., Durban, Natal, for direct shipment per steamer.

709 **Furniture.**—Particulars of a good opening for the sale of furniture in **New Zealand** can be secured at this office. A firm with a good connection desiring to act agents for a Canadian manufacturer.

710 **Fish Skins.**—**Antwerp, Belgium,** wholesale dealer in fish products desires quotations on fish skins from Canadian exporters. References.

711 **Hair.**—A merchant firm in close touch with the **Yorkshire** manufacturing trades are open to receive samples and prices from Canadian shippers of washed (white or colored) cow, calf and goat hair.

712 **Hair.**—A request has been made by a **North of England** firm for the names of Canadian shippers of washed cow, calf and other hair, samples and prices invited.

713 **Hickory Pick Handles.**—A **Manchester** firm asks for prices of hickory pick handles, all sizes, from Canadian manufacturers.

714 **Hides and Skins.**—A firm of auctioneers in the port of **Hull, England,** would like to receive a sample consignment from Canada of hides and skins, with a view to regular consignments to be disposed of at a commission of 2½ per cent. References furnished.

715 **Hardware, Farm Implements, General Merchandise.**—**Auckland, New Zealand,** firm of manufacturers' agents with connection all over the world, desire to correspond with Canadian firms with a view to securing their agency for New Zealand. Excellent references.

716 **Hardwood Sawdust.**—A large firm in **London, England,** are in the market to purchase pure hardwood sawdust from Canadian manufacturers.

717 **Household Chair, Canvas, Ducks, Rope and Twine, Hollow-Ware, Perambulators and Go-Carts, Tents, Cutlery, Wringers, Lanterns.**—A prominent wholesale firm of importers in Adelaide, Australia, with a first-class connection, are in the market to purchase the above and other goods from Canadian firms. Have been doing business with United States and Canada in the past and desire to give more of their business to Canada. Will purchase outright, paying cash against documents in Canada. Good banking references and Canadian references later. Amounts purchased will depend on price.

718 **Household Locks and Padlocks.**—Hong Kong commission merchant, doing an extensive business, wants catalogues and price lists of all kinds of household locks and padlocks.

719 **Incandescent and Gas Mantles.**—Lancashire, England, wholesale dealers in mantles and lighting fixtures is in the market to purchase hundred-gross lots of mantles from Canadian firms. Will pay cash on delivery. References.

720 **Iron Bedsteads and Mattresses.**—A firm in **British Guiana** desires correspondence with manufacturers of the following articles in Canada: Boots and shoes, tweeds and serges, corsets, soap and perfumery, confectionery.

721 **Keyboards**—A **London** company seeks supplies of wooden piano keyboards, and invites quotations from Canadian manufacturers.

722 **Laths**—A **Lancashire** firm want to obtain prices of sawn plaster laths in 500 feet bundles, sizes 3 feet 4 inches, 4 feet 6 inches, by 1 1-8 inches by 3-16 inches, from Canadian manufacturers.

723 **Lawn Mowers.**—A **Manchester** firm asks for prices of lawn mowers from Canadian manufacturers.

724 **Machine Tools.**—**Glasgow, Scotland,** manufacturers' agent who claims to have good connection is anxious to secure the agency of a Canadian manufacturer of machine tools and other machinery which would sell in that country.

725 **Manufacturers' Agent.**—**Ottawa** gentleman with considerable business experience would be glad to act as representative for Canadian houses in his neighborhood or any other part of Canada. Will handle any lines. Good references.

726 **Manufacturers' Agent.**—Well-known Montreal firm of commission agents are anxious to secure the representation for eastern Canada of manufacturers of shirts, collars, underwear, stockings, neckwear, fancy vests, braces, belts, sweaters, etc.

727 **Maple Last Blocks.**—An important Scottish manufacturing company, who are buyers of maple last blocks, would be pleased to receive prices and samples from Canadian manufacturers of such goods.

728 **Metals, Hides, Furs, Etc.**—**A London** firm desires to be placed in communication with Canadian exporters of metals, antimony ore, wolfram ore, lead ore, asbestos; also hides, furs, skins, tallows, greases, etc., and general produce.

729 **Mechanical Appliances.**—A well-connected firm of engineer's agents and merchants in the North of England will be glad to receive catalogues from Canadian firms making any mechanical appliances or specialty with a view to taking up their agency.

730 **Men's Clothing, Ladies' Apparel, Boots and Shoes.**—A United States firm of credit clothiers are about to open stores in Western Canada, and are anxious to receive price lists, Catalogues, etc., from Canadian manufacturers who might be able to supply them with stock.

731 **Newspaper.**—**Havana, Cuba,** firm of general importers with first-class connection and references are in the market to purchase newspaper made from wood pulp from Canadian manufacturers. Will buy in large and small quantities, prices to be c.i.f. Havana.

732 **Office Devices.**—A company in **Georgetown, British Guiana,** dealing in stationery, desires catalogues and prices of office files, and requisites from Canadian manufacturers.

733 **Organs.**—A **South African** wholesale and retail dealer in musical instruments desires to be placed in communication with Canadian manufacturers of organs.

734 **Paper.**—A **South African** wholesale importing and exporting house desires to be placed in communication with Canadian manufacturers of all kinds of paper.

735 **Paper, Etc.**—A **Liverpool** firm manufacturing writing, typewriting, printing, wrapping, cover, manifold and blotting papers, as well as mounting boards, box boards and manillas, desires to increase its business in Canada.

736 **Paraffine Wax.**—A **Manchester** firm wishes to obtain samples and prices of paraffine wax from Canadian manufacturers.

738 **Piano Keyboards.**—Large firm of piano dealers in **London, England,** are in the market to purchase best quality, white basswood, piano key boards from Canadian firms. Will order in 5,000 lots. Dimensions can be secured at this office.

739 **Pianos.**—A **Yorkshire** firm of musical instrument importers would like to have catalogues and prices from Canadian firms making pianos to English standards.

740 **Picture Mouldings.**—A firm in Yorkshire will consider prices for shipments of picture-frame mouldings (preferably oak) in all widths up to 4 inches, by 3-8 and 7-8 inch thick.

741 **Pig Lead.**—A **Hong Kong** firm of commission merchants want to purchase in large quantities pig lead. This is imported extensively into China.

742.—**Picture Moulding.**—A **Barbados** firm doing business in picture framing desires prices and catalogues of picture moulding and material for framing from manufacturers in Canada.

743 **Picture Moulding.**—A dealer in picture frames and moulding in **Barbados** desires prices of cheap moulding and picture frame materials.

744 **Pine Sidings.**—A **Lancashire** firm now buying in United States wishes to obtain c.i.f. prices of pine sidings, sizes 1 inch, 1¼ inch, 1½ inch, and 2 inch, unassorted best seconds and thirds from Canadian manufacturers.

745 **Plywood.**—A firm of timber importers, making a specialty of 3-ply wood, wish to hear from Canadian shippers, with samples, full particulars and prices c.i.f. Hull.

746 **Preserved Provisions.**—A merchant firm in the **North of England,** dealing largely in preserved provisions for supplying ships, would like to hear from Canadian exporters of goods suitable for this trade.

747 **Potato Starch.**—A **Manchester** firm desires to obtain samples and prices of potato starch from Canadian manufacturers.

748 **Produce.**—Inquiry has been received from a firm of commission merchants in London claiming to have connections in the largest markets for the names of Canadian exporters of various kinds of produce who might desire to place consignments in their hands for sale.

749 **Reapers and Binders.**—A **South African** firm of wholesale general merchants desire to be placed in communication with Canadian manufacturers of reapers and binders.

750 **Ropes and Twines.**—A well-connected merchant firm desires to secure the sole agency for the **North of England and Norway** and Sweden for a Canadian firm manufacturing ropes, twines, binder twine, etc.

751 **Rushes.**—A **Hull** importing firm inquires into the prospects of securing supplies of coopers' rushes from Canada, imported in bundles of about 12 pounds, in average loads of 63 bundles. They also inquire for rushes as used by chair and horse collar manufacturers.

752 **Saw-Mill Machinery.**—A company in **Berbice, British Guiana,** desires catalogues of saw-mill machinery from Canadian manufacturers.

753 **Semi Steel Castings.**—Old firm, member of C. M. A., is in the market to purchase semi steel castings.

754 **Slate Battens.**—A **Manchester** firm asks for prices of slate battens, length 2 feet 6 inches to 4 feet 6 inches by 2 inches by 3-4 inches and 2 inches by 5-8 inches from Canadian manufacturers.

755 **Skewers.**—A **Salford** firm now buying in United States asks for c.i.f. prices of sample skewers packed in barrels, sizes 4 1-2 inches by 5-32 inches, 5 1-2 inches by 7-32 inches, and 6 inches by 1-4 inch from Canadian manufacturers.

756 **Squares.**—A **Manchester** firm wishes to obtain prices of maple and birch squares from Canadian manufacturers.

757 **Split Peas.**—A **Manchester** firm seeks for samples and prices of split peas from Canadian shippers.

758 **Starch.**—A **Manchester** firm asks for samples and prices of starch from Canadian manufacturers.

759 **Specialty.**—A merchant firm in touch with the colliery, shipbuilding and ship-repairing trades in the north of England would like to hear of any Canadian specialty they could handle to advantage in supplying these trades.

760 **Steel Rails**—A **Tyneside** firm of engineering agents are desirous of negotiating with a Canadian firm manufacturing tramway and other rails with a view to actively representing their interests among corporations and other purchasers.

761 **Soap, Perfumery, Etc.**—A druggist in British Guiana desires correspondence with manufacturers of soap, perfumery, chocolate and confectionery in Canada.

762 **Single Switches, Battery Wire, Terminal, Round Wires, Etc.** —**Manitoba** firm, member of C. M. A., are in the market to purchase the above material and other equipment used in the manuacture of gasoline engines.

763 **Straw Boards.**—A **Manchester** firm asks for samples and prices of straw boards from Canadian manufacturers.

764 **Timber Specialties.**—An **English** firm of timber importers wish to get into communication with Canadian firms exporting any specialties in the timber line with a view to possibly taking up their agency.

765 **Timber.**—A **Manchester** timber merchant desires to hear from Canadian firms who cut spruce or other soft wood on the rotary principle, 1-8 inch thick, 6 inches to 9 inches wide, and 3 feet 6 inches, to 5 feet 3 inches in length.

766 **Trade.**—A **North-East** coast **(England)** firm of import and export merchants are open to push the sale of some good selling commodity of Canadian production, preferably a manufactured article.

767 **Timber of all Kinds, Barrel Staves, Cereals and Seeds, Cod Fish, Fine Skins, Canned Fish, Etc.—Bilbao, Spain,** wholesale commission merchant will be glad to hear from Canadian exporters of the above lines with a view to securing their agency for his neighborhood. References later.

768 **Tool and Broom Handles, Woodenware, Hardware, Etc.**— Well-known manufacturers' agent in Birmingham, England, with wide connection among the best buyers, will visit Canada during the next few months with a view to establishing connections with reliable firms who can export the above lines to Great Britain. Will be pleased to call on any firms who desire to see him. Has done business for Canadian and American houses in the past. Good references.

769 **Tool and Broom Handles, Dowels, Mouldings, Screwers, Office Furniture, Tables, Chairs, Brackets, Wheel Barrows.**—One of the largest wholesale firms dealing in all kinds of wood turnery and joinery is in the market to purchase the above articles from Canadian manufacturers. Excellent references and will buy in large quantities.

770 **Veneer.**—A **Manchester** firm asks for samples and prices of 3-ply alder veneer, 3-16 and 1-4 inch, from Canadian manufacturers.

771 **Veneer Seats and Backs.**—A **South African** firm of general merchants desire to be placed in communication with Canadian manufacturers of perforated veneer seats and backs for chairs.

772 **Washboards.**—A **Scottish** company would be pleased to receive quotations from Canadian manufacturers of washboards who seek export trade.

773 **Wools.**—A merchant firm in close touch with the **Yorkshire** woollen industry asks for samples and prices from Canadian shippers of all kinds of wool, suitable for the Bradford blanket and woollen trades.

774 **Woodenware.**—A London firm importing turnery and domestic woodenware of all kinds would be pleased to hear from Canadian manufacturers seeking export trade in such goods as fork, rake, pick and sledge hammer handles; fork, spade and shovel trees, skewers, dowels, wheelbarrows; also roll-top desks and office furniture.

775 **Wood Spiles.**—A **Manchester** firm asks for samples and prices of wood spiles, all sizes, from Canadian manufacturers.

776 **Wood-Pulp, Etc.**—A London firm of steamship brokers desires to hear from parties in Canada to whom they might be able to be of service. They are also prepared to handle shipments of wood-pulp, pulp-wood and other Canadian products.

777 **Waggon Tongue Ends.**—Ontario firm, member of C. M. A., inquires for manufacturers of iron for ends of tongues for waggons.

778 **Washed Cow and Goat Hair.—Glasgow, Scotland,** wholesale firm desires quotations and samples of hair, suitable for builders and plasterers, from Canadian manufacturers. Will purchase two ton lots and upwards, paying monthly or as may be arranged. Quote to Glasgow.

List of Articles Manufactured in Canada

BY THE MEMBERS OF THE

Canadian Manufacturers' Association

(Incorporated)

ARRANGED ALPHABETICALLY

An Asterisk (*) indicates that the firm so marked carries on an export trade.

A

1 ACCUMULATORS, Hydraulic.

*Perrin, Wm. R. & Co., Limited, Toronto, Ont. (Adv. page 863.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)

2 ACIDS.

Canada Chemical Mfg. Co., Limited, London, Ont. (Adv. page 1033.)
Cowan, John, Co., Limited, Montreal, Que.
*Dominion Tar & Chemical Co., Limited, The, Sydney, N.S.
Nichols Chemical Co., of Canada, Limited, The, Montreal, Que. (Adv. page 1045.)
*Standard Chemical Co., Limited, The, Toronto, Ont. (Adv. page 1032.)
Victoria Chemical Co., Limited, Victoria, B.C.

3 ACIDS, Acetic.

Canada Chemical Mfg. Co., Limited, London, Ont. (Adv. page 1033.)
*Standard Chemical Co., of Toronto, Limited, The, Toronto, Ont. (Adv. page 1032.)

4 ACIDS, Carbolic.

*Dominion Tar & Chemical Co., Limited, The, Sydney, N.S.

5 ACIDS, Sulphuric, Muriatic and Nitric.

Canada Chemical Mfg. Co., Limited, The, London, Ont. (Adv. page 1033.)
*Dominion Iron & Steel Co., Limited, Sydney, N.S.
Nichols Chemical Co., of Canada, Limited, The, Montreal, Que. (Adv. page 1045.)
Victoria Chemical Co., Limited, Victoria, B.C.

6 ACTIONS, Piano.

Barthelmes, A. A., & Co., Limited, Toronto, Ont.
*Higel, The Otto, Co., Limited, Toronto, Ont.

7 ACTIONS, Playerpiano.

*Higel, The Otto, Co., Limited, Toronto, Ont.

8 ADZES.

*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
Fowler, The Josiah, Co., Limited, St. John, N.B.
Warnock, The James, Co., Limited, Galt, Ont.
*Welland Vale Mfg. Co., Limited, The, St. Catharines, Ont. (Adv. page 1040.)

9 AGATEWARE.

*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Kemp Mfg. Co., Toronto, Ont.

10 AGRICULTURAL IMPLEMENTS.

*Bailey-Underwood Co., Limited, New Glasgow, N.S.
*Belanger, A., Montmagny, Que.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Cockshutt Plow Co., Limited, Brantford, Ont.
*Cossitt Co., Limited, The, Brockville, Ont.
Fleury's Sons, J., Aurora, Ont.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*International Harvester Co., of Canada, Limited, Hamilton, Ont., (Adv. page 848.)
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Maxwell, David, & Sons, St. Mary's, Ont.
*Noxon Co., Limited, The, Ingersoll, Ont.
*Paris Plow Co., Limited, The, Paris, Ont.
Royal Mfg. Co., Limited, Winnipeg, Man.
Shantz, P. E., Preston, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.
Tolton Bros, Limited, Guelph, Ont.
*Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)
Vilas, W. F., Cowansville, Que.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.
Western Implement Mfg. Co., Winnipeg, Man.
*Wilkinson Plow Co., Toronto, Ont.

11 AIR WASHERS.

See Washers, Air.

12 ALABASTINE.

Alabastine Co., Limited, The, Paris, Ont.

13 ALARMS, Electric and Automatic Sprinkler.

McGuire, W. J., Limited, Toronto, Ont. (Adv. page 1039.)

14 ALARMS, Water, High and Low.

*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

15 ALCOHOL.

*Corby, H., Distillery Co., Limited, Corbyville, Ont.
*Gooderham & Worts, Limited, Toronto, Ont.
*Hamilton Distillery Co., Limited, The, Hamilton, Ont.
St. Hyacinthe Distillery, Packing & Vinegar Co., Ltd., The, St. Hyacinthe, Que.
Walker, Hiram & Sons, Limited, Walkerville, Ont. (Adv. page 1008.)

16 ALCOHOL, Wood.

Algoma Steel Co., Limited, The, Sault Ste. Marie, Ont. (Adv. page 1059.)
*Standard Chemical Co., of Toronto, Limited, The, Toronto, Ont. (Adv. page 1032.)
*Wood Products Co., of Canada, Limited, The, Toronto, Ont.

17 ALE AND LAGER BEER.

Boswell & Bro., Limited, Quebec, Que.
British American Brewing Co., Limited, Windsor, Ont.
Calgary Brewing & Malting Co., Limited, Calgary, Alta.
Canadian Breweries, Limited, Montreal, Que.
Carling Brewing & Malting Co., London, Ont.
Cosgrave Brewery Co., of Toronto, Limited, The, Toronto, Ont.
Dawes & Co., Montreal, Que.
Dominion Brewery Co., Limited, The, Toronto, Ont.
*Dow, Wm., & Co., Montreal, Que.
Drewry, Edward L., Winnipeg, Man.
Edmonton Brewing & Malting Co., Limited, The, Edmonton, Alta.
Hamilton Brewing Association, Limited, The, Hamilton, Ont.
Holliday Bros., Guelph, Ont.
Huether, C. N., Berlin, Ont.
Keith, A., & Son, Halifax, N.S.
*Labatt, John, London, Ont.
McDonagh & Shea, Winnipeg, Man.
Molson, John H. R., & Bros., Montreal, Que.
*O'Keefe Brewery Co., of Toronto, Limited, The, Toronto, Ont.
Proteau & Carignan, Quebec, Que.
*Ready, James, Limited, St. John, N.B.
Reinhardt & Co., Toronto, Ont.
Simeon Jones, Limited, St. John, N.B.
Sleeman & Sons, Guelph, Ont.
Toronto Brewing & Malting Co., Limited, Toronto, Ont.
*Victoria Phoenix Brewing Co., Limited, The, Victoria, B.C.
Walkerville Brewing Co., Limited, The, Walkerville, Ont.

18 ALE, Ginger.

Christin, J., & Co., Inc., Montreal, Que.
Drake, Francis, New Glasgow, N.S.
*Gurd, Charles, & Co., Limited, Montreal, Que.
*McLaughlin, J. J., Limited, Toronto, Ont.
Taylor & Pringle Co., Limited, Owen Sound, Ont.
1000 Islands Mineral Water Co., Limited, Brockville, Ont.
Timmons, M., & Son, Quebec, Que.
*Tune, J., & Son, London, Ont.

19 ALLEYS, Bowling.

Brunswick-Balke-Collender Co., The, Toronto, Ont.

20 ALTARS.

*Blonde Lumber & Mfg. Co., Limited, The, Chatham, Ont.
*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042.)

21 ALUMINA, Sulphate of.

Nichols Chemical Co., of Canada, Limited, The, Montreal, Que.

22 AMBULANCES.

See Wagons, Ambulance, etc.

23 AMMETERS.

Canadian General Electric Co., Limited, Toronto, Ont.

24. AMMONIA AND AMMONIA PRODUCTS.

Canada Chemical Mfg. Co., Limited, The, London, Ont. (Adv. page 1033.)
Cowan, John, Co., Limited, Montreal, Que.
Michigan Ammonia Works, Toronto, Ont.
Moss Chemical Mfg. Co., Toronto, Ont.
*Pendray, W. J., Victoria, B.C.
*Sultana Mfg. Co., Montreal, Que.

25 AMMONIA POWDER.

*Lawrason, S. F., & Co., London, Ont.
Nicholson & Brock, Toronto, Ont.
Richards' Pure Soap Co., Limited, The, Woodstock, Ont.

26 AMMONIA, Sulphate of.

*Dominion Iron & Steel Co., Limited, Sydney, N.S.

27 AMMUNITION.

*Dominion Cartridge Co., Limited, Montreal, Que.

28 ANDIRONS, Brass and Iron.

Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)
Mitchell, The Robert, Co., Limited, Montreal, Que.

29 ANGLES, Steel.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Bridge Co., Limited, The, Walkerville, Ont. (Adv. page 1044.)
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Hamilton Steel & Iron Co., Limited, The, Hamilton, Ont. (Adv. page 1029.)
Nova Scotia Steel & Coal Co., Limited, The, New Glasgow, N.S. (Adv. page 870.)
Phoenix Bridge & Iron Works, Limited, The, Montreal, Que.

30 ANILINES.

Cowan, John, Co., Limited, Montreal, Que.

31 ANNUNCIATORS.

Canadian General Electric Co., Limited, Toronto, Ont.
*Forman, John, Montreal, Que.

*Norton Telephone Mfg. Co., Limited, Toronto, Ont. (Adv. page 1022.)
*Starr, John, Son & Co., Halifax, N.S.

32 ANTIMONY.

*Consolidated Mining & Smelting Co., of Canada, Limited, Trail, B.C. (Adv. page 1026.)
Dominion Antimony Co., Limited, Halifax, N.S.
*Tallman, J. N., & Sons, Hamilton, Ont.

33 ANTIPHLOGISTINE.

*Denver Chemical Mfg. Co., The, Montreal, Que.

34 ANTITOXINS.

*Parke, Davis & Co., Walkerville, Ont.

35 APPLES, Evaporated.

See Fruit, evaporated.

36 APPLE WASTE.

See Pulp, Fruit and Vegetable.

37 APPLIANCES, Air.

Canadian Rand Co., Limited, Montreal, Que.

38 APRONS, Rubber and Waterproof.

*Canadian Rubber Co., Limited, The, Montreal, Que (Adv. opp. Inside Back Cover.)
Guelph Oiled Clothing Co., Limited, The, Guelph, Ont.

39 ARBORS, Saw.

Augustin & Daudelin, St. Hyacinthe, Que.
Cowan & Co., of Galt, Limited, Galt, Ont.
Gardner, Robert, & Son, Montreal, Que. (Adv. page 1043.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Long, The E., Mfg. Co., Limited, Orillia, Ont.
Matheson, I. & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
Robertson Machinery Co., Limited, The, Welland, Ont.
*St. John Iron Works, Limited, St. John, N.B.
Smart, The James Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
*Waterous Engine Works Co., Limited, The, Brantford, Ont., (Adv. page 861.)

40 ARRESTORS, Lightning.

Canadian General Electric Co., Limited, Toronto, Ont.

41 ARSENIC, White.

*Deloro Mining & Reduction Co., Limited, Deloro, Ont.

42 ART SQUARES, Ingrain, Wool, Union.

Guelph Carpet Mills Co., Limited, The, Guelph, Ont.
Toronto Carpet Mfg. Co., Limited, Toronto, Ont.

43 ASBESTOS.

*Bell Asbestos Mines, Thetford Mines, Que.
*Canadian Asbestos Co., Montreal, Que.
Eureka Mineral Wool and Asbestos Co., Toronto, Ont. (Adv. page 1012.)

44 ASBESTOS CEMENT.

See Cement, Asbestos, Furnace and Plastic.

45 ASPHALTUM.

*Brantford Roofing Co., Limited, Brantford, Ont.
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
Crescent Oil Co., The, Hamilton, Ont.

46 ATOMIZERS.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)

47 ATOMIZERS, Steam.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

48 AUGERS, Millwrights' and Ships.

Gilmore, G., Montreal, Que.
Taylor-Forbes Co., Limited, Guelph, Ont.

49 AUGERS, Post-hole.

Taylor-Forbes Co., Limited, Guelph, Ont.

50 AUTOHARPS.

*Barthelmes, A. A., & Co., Limited, Toronto, Ont.

51 AUTOMOBILE BODIES, TOPS AND TRIMMINGS.

Conboy Carriage Co., Limited, The, Toronto, Ont.
*Gray, The Wm., & Sons Co., Limited, Chatham, Ont.
Hutchison & Son, Toronto, Ont.

52 AUTOMOBILES.

Boyce Carriage Co., The, Winnipeg, Man.
*Canada Cycle & Motor Co., Limited, West Toronto, Ont. (Adv. opp. Inside Back Cover.)
*Ford Motor Co., of Canada, Limited, The, Walkerville, Ont., (Adv. page 829.)
McLaughlin Carriage Co., Limited, Oshawa, Ont.
*Packard Electric Co., Limited, The, St. Catharines, Ont. (Adv. page 876.)

53 AUTOMOBILES, Toy.

Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)

54 AWNINGS AND TENTS.

*Bromley & Hague, Limited, Winnipeg, Man.
*Canadian Colored Cotton Mills Co., Limited, The, Montreal, Que. (Adv. page 846.)
Edmonton Tent & Mattress Co., Limited, Edmonton, Alta.
*Hague, Armington & Co., Limited, Winnipeg, Man.
Hamilton Cotton Co., Hamilton, Ont. (Adv. page 870.)
Imperial Cotton Co., Limited, Hamilton, Ont.
Leckie, John, Limited, Toronto, Ont.
*Merchants' Awning Co., Limited, Montreal, Que.
*Montreal Tent, Awning & Tarpaulin Co., Montreal, Que.
*Morrice, The D., Co., Limited, Montreal, Que.
*Peterboro Canoe Co, Limited, The, Peterboro, Ont.
*Sonne, Thos., Sr., Montreal, Que.
*Turner, Beeton & Co., Limited, Victoria, B.C.
*Turner, J. J., & Sons, Peterboro, Ont.
*Woods, Limited, Ottawa, Ont.

55 AWNINGS, Metal.

*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994 and 995.)

56 AXES.

Bedford Mfg. Co., The, Bedford, Que.
*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
*Dundas Axe Works, The, Dundas, Ont. (Adv. page 1063.)
Fowler, The Josiah, Co., Limited, St. John, N.B.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Walters, H., & Sons, Hull, Que.
Warnock, James, Co., Limited, Galt, Ont.
*Welland Vale Mfg. Co., Limited, The, St. Catharines, Ont. (Adv. page 1040.)
*Woods Limited, Ottawa, Ont.

57 AXLES AND WHEELS, Roller Skate.

Morrow, The John, Screw, Limited, Ingersoll, Ont.

58 AXLES, Buggy, Carriage and Wagon.

Ackland, D., & Son, Limited, Winnipeg, Man.
*Armstrong, The J. B., Co., Limited, Guelph, Ont. (Adv. page 996.)
Fowler, The Josiah, Co., Limited, St. John, N.B.
*Gananoque Spring & Axle Co., Limited, The, Gananoque, Ont.
Guelph Spring & Axle Co., Limited, Guelph, Ont.
Heard, John, & Co., St. Thomas, Ont.
Plessisville, La Fonderie de, Plessisville, Que.
*Starr Mfg. Co., Limited, Dartmouth, N.S.

59 AXLES, Car Wheel.

*Canada Forge Co., Limited, Welland, Ont. (Adv. page 1027.)
Hamilton Steel & Iron Co., Limited, The, Hamilton, Ont. (Adv. page 1029.)
Nova Scotia Steel & Coal Co., Limited, New Glasgow, N.S. (Adv. page 870.)
Rhodes, Curry & Co., Limited, Amherst, N.S.

60 AXLES (Steel), Perambulator, Express Wagon and Go-Cart.

Morrow, The John, Screw, Limited, Ingersoll, Ont.

61 AXLES, Taper-Roller Bearing.

*Canadian Bearings, Limited, Hamilton, Ont.

62 AXLE DIES.

See Dies, Axle.

63 AXLE STRAIGHTENERS.

See Straighteners, axle.

B

64 BACKING, Picture and Mirror.

*Matthews Bros., Limited, Toronto, Ont.
*Phillips Mfg. Co., Limited, Toronto, Ont. (Adv. page 1000.)
Rathbun Co., The, Deseronto, Ont.
Toronto Picture Frame Co., The, Toronto, Ont.

65 BACKS AND BLOCKS, Brush.

*Meakins & Sons, Hamilton, Ont.
Meyer-Thomas Co., Limited, The, Montreal, Que.
*Rider & Kitchener Co., Limited, The, Lindsay, Ont.

66 BACON.

*Canadian Packing Co., Limited, London, Ont.
*Collingwood Packing Co., Limited, Collingwood, Ont.
*Davies, The Wm., Co., Limited, Toronto, Ont.
*Davis & Fraser, Halifax, N.S.
*Fearman, F. W., Co., Limited, Hamilton, Ont.
*Fowler's Canadian Co., Limited, Hamilton, Ont.
Gallagher-Hull Meat & Packing Co., Limited, The, Edmonton, Alta.
*Gunns Limited, Toronto, Ont.
*Ingersoll Packing Co., Limited, The, Ingersoll, Ont.
Laing Packing & Provision Co., Limited, The, Montreal, Que.
*Matthews, The Geo., Co., Limited, Peterboro, Ont.
Montreal Packing Co., Ltd., The, Montreal, Que.
*O'Mara, Joseph, Palmerston, Ont.
*Park, Blackwell Co., Limited, Toronto, Ont.
Western Packing Co., of Canada, Limited, The, Winnipeg, Man.
Whyte Packing Co., Limited, The, Stratford, Ont.
*Wilson, The B., Co., Limited, Victoria, B.C.

67 BADGES, Metal.

Birks, Henry, & Sons, Limited, Montreal, Que.
*Caron Bros., Montreal, Que.
*Ellis, P. W., Co., Limited, Toronto, Ont. (Adv. page 855.)
Hamilton Stamp & Stencil Works, Limited, Hamilton, Ont.
*Hemsley Mfg. Co., The, Montreal, Que.
*Lees, Geo. H., & Co., Limited, Hamilton, Ont.
*Montreal Stencil Works, Montreal, Que. (Adv. page 1032.)
*Roden Bros., Toronto, Ont. (Adv. page 1048.)
*Scully, William, Montreal, Que.
Toronto Stamp & Stencil Works, Toronto, Ont.
*Zock, J. J., & Co., Limited, Toronto, Ont.

68 BADGES, BANNERS, ETC., Lodge, Society & Church.

*Blake, W. E., Toronto, Ont.
*Dominion Regalia Co., Limited, The, Toronto, Ont.
Mortimore & Blackeby, Toronto, Ont.

69 BAGGERS.

American-Abell Engine & Thresher Co., Limited, Toronto, Ont.
Sawyer & Massey Co., Limited, Hamilton, Ont.
*White, The Geo., & Sons Co., Limited, London, Ont.

70 BAGS, Camping, Dunnage and Sleeping.

*Bromley & Hague, Limited, Winnipeg, Man.
Edmonton Tent & Mattress Co., Limited, Edmonton, Alta.
*Hague, Armington & Co., Limited, Winnipeg, Man.
Leckie, John, Limited, Toronto, Ont.
*Montreal Tent, Awning & Tarpaulin Co., Montreal, Que.
*Sonne, Thos., Sr., Montreal, Que.
*Turner, Beeton & Co., Limited, Victoria, B.C.
*Turner, J. J., & Sons, Peterboro, Ont.

71 BAGS, Cotton and Jute.

*Canadian Bag Co., Limited, The, Montreal, Que.
*Dominion Textile Co., Limited, Montreal, Que.
*Smart Bag Co., Limited, The, Montreal, Que. (Adv. page 836.)

72 BAGS, Leather (Ladies).

Flett, Lowndes & Co., Limited, Toronto, Ont.
*General Leather Goods, Limited, Toronto, Ont.
Sale, The Julian, Leather Goods Co., Ltd., Toronto, Ont.

73 BAGS, Mail, Coal and Feed.

*Canadian Bag Co., Limited, The, Montreal, Que.
*Hague, Armington & Co., Limited, Winnipeg, Man.
Leckie, John, Limited, Toronto, Ont.
*Montreal Tent, Awning & Tarpaulin Co., Montreal, Que.
*Sonne, Thos., Sr., Montreal, Que.
*Turner, J. J., & Sons, Peterboro, Ont.
*Woods, Limited, Ottawa, Ont.

74 BAGS, Paper.

Buntin, Gillies & Co., Limited, Hamilton, Ont.
*Dominion Paper Co., Montreal, Que.
Lincoln Paper Mills Co., Limited, The, Merritton, Ont.
*Reason, H. T., & Co., London, Ont.

St. Lawrence Paper Bag Co., Quebec, Que.
Wiser, The J. C., & Co., Limited, Montreal, Que.

75 BAGS, Rubber.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)

76 BAGS, Travelling.

Adams Bros., Harness Mfg. Co., Limited, The, Toronto, Ont.
Canada Leather Goods Co., Montreal, Que.
*Christie Bros., & Co., Limited, Amherst, N.S. (Adv. page 1057.)
*Eveleigh, J., & Co., Limited, Montreal, Que.
*Great West Saddlery Co., Limited, The, Winnipeg, Man.
Kelly's, Limited, Halifax, N.S.
*Lamontagne, Limited, Montreal, Que.
*Langmuir, The M., Mfg. Co., Limited, Toronto, Ont. (Adv. page 1056.)
*McBrine, The L., Co., Limited, Berlin, Ont.
McLeod, Hawthorne Co., Limited, Montreal, Que.
Trunk & Leather Goods Co., Toronto, Ont.

77 BALCONIES, Wrought Iron.

Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)

78 BALLS, Billiard and Pool.

*May, Samuel, & Co., Toronto, Ont. (Adv. page 1016.)

79 BALLS, Rubber.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)

80 BALLS, Wood, Bowling Alley, etc.

*May, Samuel, & Co., Toronto, Ont. (Adv. page 1016.)
Otterville Mfg. Co., Limited, Otterville, Ont.
*Paquet & Godbout, St. Hyacinthe, Que.

81 BALUSTERS AND BANNISTERS.

Anglin, S., & Co., Kingston, Ont.
Cargill, H., & Son, Cargill, Ont.
Christie Woodworking Co., Limited, The, St. John, N.B.
Cushing Bros. Co., Limited, Calgary, Alta.
Dempster, James, & Co., Halifax, N.S.
Gignac, J. H., Limited, Quebec, Que.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
*Heaps, E. H., & Co., Vancouver, B.C. (Adv. page 850.)
Kerr, J. & J., Co., Limited, Petrolia, Ont.
Lemon, Gonnason, & Co., Victoria, B.C.
*Murray & Gregory, Limited, St. John, N.B.
*Paquet & Godbout, St. Hyacinthe, Que.
Pauze, The U., & Fils Co., Montreal, Que.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Rutherford, The Wm., & Sons Co., Montreal, Que.
Tait & Co., Toronto, Ont.

82 BANDS, Carriage.

*Skinner Co., Limited, The, Gananoque, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

83 BANDS, Rubber.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)

84 BANDS, Shingle, Steel.

McLennan, McFeely & Co., Limited, Vancouver, B.C.

85 BANK NOTES (Bills.)

*American Bank Note Co., Ottawa, Ont.
British American Bank Note Co., Limited, Ottawa, Ont. (Adv. page 1017.)

86 BARBERS' SUPPLIES.

*Jones Bros. & Co., Limited, Toronto, Ont.
*Sovereign Perfumes, Limited, Toronto, Ont.

87 BARGES, Steel.

Canadian Shipbuilding Co., Limited, Toronto, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

88 BARKERS, Pulp-Wood.

Hay, The Peter, Knife Co., Limited, Galt, Ont.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Plessisville, La Fonderie de, Plessisville, Que.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

89 BARLEY, Pot and Pearl.

*Brackman-Ker Milling Co., Limited, Victoria, B.C.
*Campbell, The John, Co., Limited, St. Thomas, Ont.
*Canada Malting Co., Limited, The, Toronto, Ont.
*Canadian Cereal Co., Limited, Toronto, Ont.
*Greig, The Robert, Co., Limited, Toronto, Ont.
McCann, Knox Milling Co., Limited, Toronto, Ont.
*McIntosh, P., & Son, Toronto, Ont.
*Niles, W. P., Wellington, Ont.
*Thomson, Walter, & Son, Limited, London, Ont.
*Western Canada Flour Mills, Limited, Toronto, Ont.
*Wilson, James, & Sons, Fergus, Ont.
*Woodstock Cereal Co., Limited, The, Woodstock, Ont.

90 BARRELS.

Butcher, F. E., St. Mary's, Ont.
Campbell, David, & Son, Montreal, Que.
*Campbell, The John, Co., Limited, St. Thomas, Ont.
*Canada Wood Specialty Co., Limited, The, Orillia, Ont
Cargill, H., & Son, Cargill, Ont.
*London & Petrolia Barrel Co., The, London, Ont.
Starke Cooperage Co., The, Montreal, Que.

91 BARRELS, Foundry, Tumbling.

Hamilton Facing Mill Co., Limited, Hamilton, Ont.
Morrow, The John, Screw, Limited, Ingersoll, Ont.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

92 BARS, Angle.

Algoma Steel Co., Limited, The, Sault Ste. Marie, Ont. (Adv. page 1059.)
*Dominion Iron & Steel Co., Limited, Sydney, N.S.
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Nova Scotia Steel & Coal Co., Limited, New Glasgow, N.S. (Adv. page 870.)

93 BARS, Boiler Grate.

*Belanger, A., Montmagny, Que.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Plessisville, La Fonderie de, Plessisville, Que.
Robertson Machinery Co., Limited, The, Welland, Ont.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

94 BARS, Crow, Claw and Tamping.

*Bailey-Underwood Co., Limited, New Glasgow, N.S.
*Cumming, J. W., New Glasgow, N.S.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041.)
Warnock, The James, Co., Limited, Galt, Ont.

95 BARS, Grate (Shaking).

Baird, H. C., Son & Co., Limited, Park Hill, Ont.
*Leonard, E., & Sons, London, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

96 BARS, Wrought Iron.

Hamilton Steel & Iron Co., Limited, The, Hamilton, Ont. (Adv. page 1029.)

97 BARS AND BENCHES, Wagon, etc.

Ackland, D., & Son, Limited, Winnipeg, Man.

98 BASES, Boiler.

*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

99 BASKETS.

*Holland, The G. A., & Son Co., Montreal, Que.
Keenan Woodenware Mfg. Co., Limited, Owen Sound, Ont.
Oakville Basket Co., The, Oakville, Ont.
Ontario Fruit Package Co., Limited, Ingersoll, Ont.
*Thomas Bros., Limited, St. Thomas, Ont.

100 BASKETS, Ambulance, Reed and Rattan.

Imperial Rattan Co., Limited, Walkerville, Ont. (Adv. page 1034.)

101 BASKETS, Bottle.

Freyseng Cork Co., Limited, Toronto, Ont.
*Thomas Bros., Limited, St. Thomas, Ont.

102 BASKETS, Wire.

Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
*Thomas Bros., Limited, St. Thomas, Ont.

103 BATHS, Enameled, Galvanized and Japanned.

*Amherst Foundry Co., Limited, Amherst, N.S. (Adv. page 849.)
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Kemp Mfg. Co., Toronto, Ont.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Robertson, The James, Co., Limited, Montreal, Que.

104 BATH TUBS.

See Tubs, Bath.

105 BATTERIES, Electric.

Canadian General Electric Co., Limited, Toronto, Ont.
Dominion Electrical Works, Limited, Halifax, N.S.
Forman, John, Montreal, Que.

106 BATTERIES, Medical.

Canadian General Electric Co., Limited, Toronto, Ont.

107 BATTERIES, Storage, for Vehicles.

Canadian General Electric Co., Limited, Toronto, Ont.

108 BATTING, Wool and Cotton.

Bauer, A., & Co., Waterloo, Ont.
Dominion Wadding Co., The, Montreal, Que.

109 BEACONS.

*International Marine Signal Co., Limited, Ottawa, Ont.

110 BEAMS, Bridge, Culvert and Structural.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Bridge Co., Limited, The, Walkerville, Ont. (Adv. page 1044.)
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Phoenix Bridge & Iron Works, Limited, The, Montreal, Que.

111 BEARINGS, Ball.

*Chapman Double Ball Bearing Co., Limited, Toronto, Ont.
Morrow, The John, Screw, Limited, Ingersoll, Ont.

112 BEARINGS, Roller.

*Canadian Bearings, Limited, Hamilton, Ont.
Morrow, The John, Screw, Limited, Ingersoll, Ont.
*Standard Bearings, Limited, Toronto, Ont.

113 BEARINGS, Self-oiling.

*Chapman Double Ball Bearing Co., Limited, Toronto, Ont.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

114 BEARINGS, Shaft.

Augustin & Daudelin, St. Hyacinthe, Que.
*Canadian Bearings, Limited, Hamilton, Ont.
*Chapman Double Ball Bearing Co., Limited, Toronto, Ont.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Letson & Burpee, Limited, Vancouver, B.C.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Plessisville, La Fonderie de, Plessisville, Que.
*Standard Bearings, Limited, Toronto, Ont.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

115 BEARINGS, Side, Railway Car.

*Dominion Car & Foundry Co., Limited, Montreal, Que. (Adv. Inside Back Cover.)

116 BEATERS, Carpet.

*Wright, E. T., & Co., Hamilton, Ont.

117 BEDDING.

*Alaska Feather & Down Co., Limited, The, Montreal, Que. (Adv. page 860.)
*Canadian Feather & Mattress Co., Limited, The, Toronto, Ont.
*Munro Wire Works, Limited, New Glasgow, N.S.
Ross, The C., Co., Limited, Ottawa, Ont.

118 BEDROOM SUITES.

See Furniture, Bedroom.

119 BEDS & PINS, Bowling Alley.

*May, Samuel, & Co., Toronto, Ont.

120 BEDS, Camp.

Otterville Mfg. Co., Limited, Otterville, Ont.
*Turner, J. J., & Sons, Peterboro, Ont.

121 BEDS, Spring.

Alaska Feather & Down Co., Limited, The, Montreal, Que. (Adv. page 860.)
*Canadian Feather & Mattress Co., Limited, The, Toronto, Ont.
*Gale, Geo., & Sons, Waterville, Que.
Gold Medal Furniture Mfg. Co., Limited, Toronto, Ont.
*Munro Wire Works, Limited, New Glasgow, N.S.

*St. Lawrence Furniture Co., The, Fraserville, Que.
Wilder, H. A., & Co., Montreal, Que.

122 BEDSTEADS, Iron and Brass.

*Gale, Geo., & Sons, Waterville, Que.
Ives, The H. R., Co., Limited, Montreal, Que.
Meaford Mfg. Co., Limited, The, Meaford, Ont.
Modern Bedstead Co., Limited, The, Cornwall, Ont.
*Munro Wire Works, Limited, New Glasgow, N.S.
*Quality Beds, Limited, Welland, Ont. (Adv. page 1031.)
Shipway Iron, Bell & Wire Mfg. Co., Limited, Toronto, Ont.
*Shurly & Dietrich, Galt, Ont.
Stanyon Metallic Furniture Co., Limited, Toronto, Ont.
*Toronto Bedding Co., Limited, The, Toronto, Ont.

123 BEE-KEEPERS' SUPPLIES.

Ham & Nott Co., Limited, Brantford, Ont.

124 BEEF, Extract of.

Northland Mfg. Co., The, Toronto, Ont.

125 BEER, Ginger.

See Ale, Ginger.

126 BEER, Lager.

See Ale and Lager Beer.

127 BELLOWS.

*Eveleigh, J., & Co., Limited, Montreal, Que.
McLeod, Hawthorne Co., Limited, Montreal, Que.

128 BELLS, Door.

*Garth Co., The, Montreal, Que.
*Gurney-Tilden Co., Limited, The, Hamilton, Ont.
*McAvity, T., & Sons, St. John, N.B.
Shipway Iron, Bell & Wire Mfg. Co., Limited, Toronto, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

129 BELLS, Electric.

Canadian General Electric Co., Limited, Toronto, Ont.
*Forman, John, Montreal, Que.
*Garth Co., The, Montreal, Que.
*McAvity, T., & Sons, St. John, N.B.
Shipway Iron, Bell & Wire Mfg. Co., Limited, Toronto, Ont.

130 BELLS, Ship and Fire.

Clark, C. O., & Bro., St. Paul, Que.
*Garth Co., The, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Piper, The Hiram L., Co., Limited, Montreal, Que.
Shipway Iron, Bell & Wire Mfg. Co., Limited, Toronto, Ont.
*Wilson & Cousins, Toronto, Ont.

131 BELLS, Sleigh.

Clark, C. O., & Bro., St. Paul, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

132 BELTING, Chain.

*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863.)

133 BELTING, Cotton.

Crescent Oil Co., The, Hamilton, Ont.
*Dodge Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
*Dominion Belting Co., Limited, Hamilton, Ont. (Adv. page 871.)
*McLaren, The J. C., Belting Co., Montreal, Que. (Adv. page 1017.)

134 BELTING, Leather.

*Beardmore & Co., Toronto, Ont.
Crescent Oil Co., The, Hamilton, Ont.
*Dodge Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
Goodhue, J. L., & Co., Danville, Que.
Hamilton Engine Packing Co., Hamilton, Ont.
*McLaren, D. K., Limited, Montreal, Que. (Adv. page 1020.)
*McLaren, The J. C., Belting Co., Montreal, Que. (Adv. page 1017.)
*Sadler & Haworth, Montreal, Que. (Adv. page 1002.)

135 BELTING, Rubber.

*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
Crescent Oil Co., The, Hamilton, Ont.
*Dodge Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)
Durham Rubber Co., Limited, Bowmanville, Ont. (Adv. page 844.)
*Gutta Percha & Rubber Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. Inside Back Inner Cover.)
*McLaren, The J. C., Belting Co., Montreal, Que. (Adv. page 1017.)

136 BELTS, Leather, Ladies' and Men's.

Canada Leather Goods Co., Montreal, Que.
*Edwards, J. E., & Sons, Bracondale, Ont.
*Fairbairn, Rhys. D., Limited, Toronto, Ont.
Flett, Lowndes & Co., Limited, Toronto, Ont.
*General Leather Goods, Limited, Toronto, Ont.
Kelly's, Limited, Halifax, N.S.
*Lamontagne, Limited, Montreal, Que.
Reid, The A. T., Co., Limited, Toronto, Ont.
*Sale, The Julian, Leather Goods Co., Limited, Toronto, Ont.
*Stewart, Howe & Meek Co., Limited, The, Toronto, Ont.
*Western Leather Goods Co., Limited, The, Toronto, Ont.

137 BELTS, Silk.

*Canadian Silk Co., Limited, Toronto, Ont.
Colonial Weaving Co., Limited, The, Peterborough, Ont.
*Fairbairn, Rhys D., Limited, Toronto, Ont.
Flett, Lowndes & Co., Limited, Toronto, Ont.
*Ladies' Wear, Limited, Toronto, Ont.
*Peters, J. Henry, Co., Toronto, Ont.
Reid, The A. T., Co., Limited, Toronto, Ont.
*Rea, A. E., & Co., Limited, Toronto, Ont.
*Stewart, Howe & Meek Co., Limited, The, Toronto, Ont.

138 BENCHES, Manual Training.

Hendry, The Geo. M., Co., Limited, Toronto, Ont.

139 BENCHES, Wagon.

See Bars and Benches, Wagon.

140 BENCHES AND CHAIRS, Piano and Organ.

*Thomas Organ & Piano Co., Woodstock, Ont.

141 BENDERS, Rail.

*Holden, N. J., Co., Limited, Montreal, Que.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041.)

142 BENDERS, Tire.

Canadian Buffalo Forge Co., Limited, Montreal, Que.
Jardine, A. B., & Co., Hespeler, Ont.
London Foundry Co., Limited, The, London, Ont.
Plessisville, La Fonderie de, Plessisville, Que.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

143 BENT GOODS.

Ackland, D., & Son, Limited, Winnipeg, Man.
*Canada Wheel Works, Limited, The, Merritton, Ont.
*Chatham Bent Goods Co., Limited, The, Chatham, Ont.
Crown Lumber Co., Limited, The, Woodstock, Ont.
Heard, John, & Co., St. Thomas, Ont.
Hore, F. W., & Son, Limited, Hamilton, Ont.
Loughead Bros., Limited, Sarnia, Ont.
McVean, O. & W., Dresden, Ont.
*Victoria Wheel Works, Galt, Ont. (Adv. page 843.)
West Lorne Wagon Co., Limited, West Lorne, Ont.
*Windsor Turned Goods Co., Limited, The, Windsor, N.S.

144 BENZINE.

*British-American Oil Co., Limited, The, Toronto, Ont.
Canadian Oil Co., Limited, Toronto, Ont.
Imperial Oil Co., Limited, The, Montreal, Que.
Queen City Oil Co., Limited, The, Toronto, Ont. (Adv. page 1028.)

145 BIBS, Children's.

Montreal Quilting Co., Limited, The, Montreal, Que.

146 BIBS, Lever, Compression.

*Garth Co., The, Montreal, Que.
London Brass Works Co., Limited, The, London, Ont.
*McAvity, T., & Sons, St. John, N.B.
Mitchell, The Robert, Co., Limited, Montreal, Que.

147 BICYCLES.

Berlin & Racycle Mfg. Co., Limited, The, Berlin, Ont.
*Canada Cycle & Motor Co., Limited, West Toronto, Ont. (Adv. opp. Inside Back Cover.)
*Lochrie, James, Toronto, Ont.

148 BILLETS, BLOOMS AND SLABS.

Algoma Steel Co., Limited, The, Sault Ste. Marie, Ont. (Adv. page 1059.)
*Dominion Iron & Steel Co., Limited, Sydney, N.S.
Hamilton Steel & Iron Co., Limited, Hamilton, Ont. (Adv. page 1029.)
Nova Scotia Steel & Coal Co., Limited, New Glasgow, N.S. (Adv. page 870.)

149 BILLIARD AND POOL TABLES.

See Tables, Billiard and Pool.

150 BINDERS, Harvesting.

*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*International Harvester Co., of Canada, Limited, Hamilton, Ont. (Adv. page 848.)
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Maxwell, David, & Sons, St. Mary's, Ont.
*Noxon Co., Limited, The, Ingersoll, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.

151 BINDER TWINE.

See Twine, Binder.

152 BINDERS, Loose Leaf.

See Systems, Loose Leaf.

153 BINDERS, Skirt and Coat.

Cascade Narrow Fabric Co., Coaticook, Que.
*Peters, J. Henry, Co., Toronto, Ont.
*Rea, A. E., & Co., Limited, Toronto, Ont.
*Stewart, Howe & Meek Co., Limited, The, Toronto, Ont.

154 BISCUITS.

Abbot, Grant & Co., Limited, Brockville, Ont.
Bean & Westlake, Woodstock, Ont.
*Christie, Brown & Co., Limited, Toronto, Ont.
Crothers, The W. J., Co., Limited, Kingston, Ont.
Doerr, C. H., & Co., Berlin, Ont.
Gagnon, J. A., & Freres, Quebec, Que.
*Hamilton, G. J., & Sons, Pictou, N.S.
Hethrington, T., Quebec, Que.
Lang Mfg. Co., The, Montreal, Que.
Lynch Bros., Dolan Co., Limited, Sydney, N.S.
*McCormick Mfg. Co., Limited, The, London, Ont.
*McLauchlan & Sons Co., Limited, Owen Sound, Ont.
*Moirs, Limited, Halifax, N.S.
Montreal Biscuit Co., The, Montreal, Que.
*Mooney Biscuit & Candy Co., Limited, The, Stratford, Ont.
Paulin Chambers Co., Limited, The, Winnipeg, Man.
*Perrin, D. S., & Co., Limited, London, Ont.
*Smith, M. R., & Co., Limited, Victoria, B.C.
Telfer Bros., Limited, Collingwood, Ont.
Viau & Frere, Montreal, Que.

155 BISCUITS AND TRISCUITS, Whole Wheat, Shredded.

*Canadian Shredded Wheat Co., Limited, Niagara Falls, Ont.

156 BITS, Auger, Solid Stem and Machine.

Gilmore, G., Montreal, Que.

157 BLACKBOARDS.

Hendry, The Geo. M., Co., Limited, Toronto, Ont.

158 BLACKING, Shoe.

See Dressing, Shoe.

159 BLANKETS.

Bird Woollen Mill Co., Limited, The, Bracebridge, Ont.
Brook Woollen Co., The, Simcoe, Ont.
Brown & Wigle Co., of Kingsville, Limited, Kingsville, Ont.
Dontigny, Philip, Arnprior, Ont.
Glen Woollen Mills, Limited, Glen Williams, Ont.
*Hewson Woollen Mills, Limited, Amherst, N.S.
Horn Bros. Woollen Co., Limited, Lindsay, Ont.
Magog Woollen Mills, Limited, Sherbrooke, Que.
Montreal Blanket Co., The, Montreal, Que. (Adv. page 846.)
*Montreal Woollen Mill Co., The, Montreal, Que.
*Oxford Mfg. Co., Limited, Oxford, N.S.
Penmans, Limited, Paris, Ont. (Adv. page 1063.)
Slingsby Mfg. Co., Limited, The, Brantford, Ont.
*Woods, Limited, Ottawa, Ont.
Wylie, James H., Limited, Almonte, Ont.

160 BLANKETS, Army and Rubber.

*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
Guelph Oiled Clothing Co., Limited, The, Guelph, Ont.

161 BLANKETS, Cotton.

*Canadian Colored Cotton Mills Co., Limited, The, Montreal, Que. (Adv. page 846.)
*Dominion Textile Co., Limited, Montreal, Que.
*Morrice, The D., Co., Limited, Montreal, Que.

162 BLANKETS, Horse.

*Ackerman, B. F., Son & Co., Peterboro, Ont.
Adams Bros. Harness Mfg. Co., Limited, Toronto, Ont.
Brook Woollen Co., The, Simcoe, Ont.
Glen Woollen Mills, Limited, Glen Williams, Ont.
*Great West Saddlery Co., Limited, The, Winnipeg, Man.
*Hague, Armington & Co., Limited, Winnipeg, Man.

*Heney, E. N., Co., Limited, Montreal, Que.
*Lamontagne, Limited, Montreal, Que.
Magog Woollen Mills, Limited, Sherbrooke, Que.
Slingsby Mfg. Co., Limited, The, Brantford, Ont.
*Turner, Beeton & Co., Limited, Victoria, B.C.
*Turner, J. J., & Sons, Peterboro, Ont.

163 BLANKET LININGS.

See Linings, Blanket.

164 BLASTING SUPPLIES.

See Dynamite.

165 BLEACHERS & DYERS.

Canadian Bleaching & Dyeing Co., The, St. Henri, Que.

166 BLINDS, Window (Roller.)

Daly & Morin, Montreal, Que.
Hees, Geo. H., Son & Co., Limited, Toronto, Ont.
*Martel Stewart Co., Limited, The, Montreal, Que.
*Smith, Carter & Smith, Limited, Montreal, Que.

167 BLINDS, Window (Wood).

Anglin, S., & Co., Kingston, Ont.
Aitchison, D., & Co., Hamilton, Ont.
*Brennen, The M., & Sons Mfg. Co., Hamilton, Ont.
*B. C. Mills, Timber & Trading Co., Vancouver, B.C.
Brockville Lumber Co., Limited, The, Brockville, Ont.
Cargill, H., & Sons, Cargill, Ont.
Cushing Bros. Co., Limited, Calgary, Alta.
Davidson, James, Ottawa, Ont.
Dempster, James, & Co., Halifax, N.S.
Gignac, Beland & Cie, Quebec, Que.
Gignac, J. H., Limited, Quebec, Que.
*Gilmore Door Co., Limited, Trenton, Ont.
Hanbury Mfg. Co., Limited, Brandon, Man.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
Itzweire & Sarrasin, Montreal, Que.
Kerr, J. & J., Co., Limited, Petrolia, Ont.
Lemon, Gonnason & Co., Victoria, B.C.
Long, The Geo., Co., Limited, Sherbrooke, Que.
*Murray & Gregory, Limited, St. John, N.B.
Nesbitt, E. T., Quebec, Que.
Patterson-Tilley Co., The, Hamilton, Ont.
Pauze, The U., & Fils Co., Montreal, Que.
Pearce Co., Limited, The, Marmora, Ont.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Rutherford, The Wm., & Sons Co., Montreal, Que.
*Schultz Bros. Co., Limited, The, Brantford, Ont.
Traversy, V. E., Montreal, Que.
Tremblay, F., & Cie., Montreal, Que.

168 BLOCKS, Brush.

See Backs and Blocks, brush.

169 BLOCKS, Building, Hollow.

*Bechtels, Limited, Waterloo, Ont.
*Standard Drain Pipe Co., of St. Johns, Que., Limited, The, St. Johns, Que. (Adv. page 854.)

170 BLOCKS, Butchers'.

*Harrison, John, & Sons, Co., Limited, Owen Sound, Ont.

171 BLOCKS, Paving, Cedar.

*Harrison, John, & Sons, Co., Limited, Owen Sound, Ont.

172 BLOCKS, Paving, Granite.

*Missisquoi Marble Co., Limited, The, Montreal, Que.
*Norton, S. B., Stanstead Junction, Que.
*Stanstead Granite Quarries Co., Limited, Beebe Plain, Que.

173 BLOCKS, Pillow.

*Dodge Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Standard Bearings, Limited, Toronto, Ont.

174 BLOCKS, Saw Mill, Head.

*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
Sawyer & Massey Co., Limited, Hamilton, Ont.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

175 BLOUSES AND SHIRT WAISTS.

*Allen Mfg. Co., Limited, Toronto, Ont.
Black, John P., & Co., Limited, Montreal, Que.
Crescent Mfg. Co., Limited, Montreal, Que.
Dupuis Freres, Limited, Montreal, Que.
Eaton, The T., Co., Limited, Toronto, Ont.
*Eclipse Whitewear Co., Limited, The, Toronto, Ont.
*Fairbairn, Rhys D., Limited, Toronto, Ont.
*Gale Mfg. Co., Toronto, Ont.
*Harrower, The G. H., Co., Montreal, Que.
Helena Costume Co., Limited, London, Ont.
Ideal Women's Wear, Limited, Toronto, Ont.
Keens Mfg. Co., Toronto, Ont.
*Ladies' Wear, Limited, Toronto, Ont.
McElroy Mfg. Co., Limited, The, Toronto, Ont.
Minerva Mfg. Co., Limited, The, Toronto, Ont.
*Montreal Suspender & Umbrella Mfg. Co., Montreal, Que.
Novi-Modi Costume Co., Limited, Toronto, Ont.
*Rea, A. E., & Co., Limited, Toronto, Ont.
Rideau Mfg. Co., The, Ottawa, Ont.
Ross, The C., Co., Limited, Ottawa, Ont.
*Standard Shirt Mfg. Co., Limited, The, Montreal, Que.
Star Whitewear Mfg. Co., The, Berlin, Ont.

176 BLOWERS, Blacksmiths'.

Canadian Buffalo Forge Co., Limited, Montreal, Que.
London Foundry Co., Limited, London, Ont.

177 BLOWERS, Grain & Straw.

See Machines, Threshing.

178 BLOWERS, Pressure.

Canadian Buffalo Forge Co., Limited, Montreal, Que.
Hamilton Facing Mill Co., Limited, Hamilton, Ont.
*Jones Underfeed Stoker Co., Limited, Montreal, Que.
London Foundry Co., Limited, The, London, Ont.
Sheldons, Limited, Galt, Ont. (Adv. page 859.)

179 BLOWERS, Rotary.

Canadian Buffalo Forge Co., Limited, Montreal, Que.

180 BLUE, Laundry.

*Douglas, J. M., & Co., Montreal, Que.
*Gillett, E. W., Co., Limited, Toronto, Ont.
*Pendray, W. J., Victoria, B.C.
Pugsley, Dingman & Co., Limited, Toronto, Ont.
*Tellier, Rothwell & Co., Montreal, Que.

181 BLUESTONE.

*Consolidated Mining & Smelting Co., of Canada, Limited, Trail, B.C. (Adv. page 1026.)

182 BOARD, Bristol, Photo Mount and Box.

Canada Coating Mills, Limited, Georgetown, Ont.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
Northumberland Paper & Electric Co., Limited, The, Campbellford, Ont.
Ritchie & Ramsay, Limited, Toronto, Ont.

183 BOARD, Friction and Leather.

*Blouin, F., Quebec, Que.
Richard & Co., Quebec, Que.
*Rochette, C., Quebec, Que.
*Walker, J. R., & Co., Montreal, Que. (Adv. page 846.)

184 BOARDS, Ironing.

Otterville Mfg. Co., Limited, Otterville, Ont.

185 BOARDS, Pastry.

*Schultz Bros. Co., Limited, The, Brantford, Ont.
*Thomas Bros., Limited, St. Thomas, Ont.

186 BOARDS, Straw.

See Strawboards.

187 BOARDS, Wood Pulp.

Ford, Jos., & Co., Portneuf Station, Que.
*Laurentide Paper Co., Limited, The, Grand Mere, Que.
Northumberland Paper & Electric Co., Limited, The, Campbellford, Ont.

188 BOARDS AND BLOCKS, Cutting, for Shirt, Glove and Shoe Manufacturers.

*Constantin & O'Brien, Montreal, Que.

189 BOATS, Sail, Row, etc., and Canoes.

*Dean, Walter, Toronto, Ont.
*Gidley, H. E., & Co., Penetanguishene, Ont.
*Peterboro Canoe Co., Limited, The, Peterboro, Ont.
*Ross, Henry, Indian Lorette, Que.

190 BOATS, Steamers and Yachts.

*British Columbia Marine Railways Co., Limited, Victoria, B.C.
Canadian Shipbuilding Co., Limited, Toronto, Ont.
*Collingwood Shipbuilding Co., Limited, Collingwood, Ont.
Fleming, James, St. John, N.B.
*Gidley, H. E., & Co., Penetanguishene, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
*Peterboro Canoe Co., Limited, The, Peterboro, Ont.
*Polson Iron Works, Limited, Toronto, Ont. (Adv. page 1033.)
Rathbun Co., The, Deseronto, Ont.
Weir, J. & R., Montreal, Que.

191 BOBBINS, Wood.

Canada Spool & Bobbin Co., Limited, Walkerton, Ont.
*Lachute Shuttle Co., Limited, The, Lachute Mills, Que.
Thompson & Co., Sherbrooke, Que.

192 BODIES, Buggy, Carriage, etc.

See Carriage Bodies in the White.

193 BOILER COMPOUNDS.

See Compounds, Boiler.

194 BOILERS, Copper Range.

Booth Copper Co., Limited, The, Toronto, Ont.
*Coulter, Wm., & Sons, Toronto, Ont.
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
*Gurney Foundry Co., Limited, The, Toronto, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
*McClary Mfg. Co, The, London, Ont. (Adv. page 1022.)
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Toronto Hardware Mfg. Co., Toronto, Ont.

195 BOILERS, Cornish.

*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

196 BOILERS, Farmers' Feed.

*Belanger, A., Montmagny, Que.
*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Record Foundry & Machine Co., Moncton, N.B.

197 BOILERS, Locomotive.

*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Fleming, James, St. John, N.B.
*Goldie & McCulloch Co., Limited, The, Galt, Ont (Adv. page 833.)
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Leonard, E., & Sons, London, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
*Polson Iron Works, Limited, Toronto, Ont. (Adv. page 1033.)
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
Smart-Turner Machine Co., Limited The, Hamilton, Ont.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
Vulcan Iron Works, Limited, The, Winnipeg, Man.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

198 BOILERS, Marine.

*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)
*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Shipbuilding Co., Limited, Toronto, Ont.
*Collingwood Shipbuilding Co., Limited, Collingwood, Ont.
*Doty Engine Works Co., Limited, The, Goderich, Ont.
Fleming, James, St. John, N.B.
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Leonard, E., & Sons, London, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.

Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
*Owen Sound Iron Works, Limited, The, Owen Sound, Ont.
*Polson Iron Works, Limited, Toronto, Ont. (Adv. page 1033.)
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
Robertson Machinery Co., Limited, The, Welland, Ont.
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
*Schaake Machine Works, Limited, The, New Westminster, B.C.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
*Stewart, Bruce & Co., Charlottetown, P.E.I.
Sydney Foundry & Machine Works, Limited, The, Sydney, N.S.
Vulcan Iron Works, Limited, The, Winnipeg, Man.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)
White, R. C., Montreal, Que.

199 BOILERS, Oil Fuel.

*Oil Well Supply Co., Limited, Petrolia, Ont.

200 BOILERS, Portable.

*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)
Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.
*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Brandon Machine Works Co., Limited, Brandon, Man.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Leonard, E., & Sons, London, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
McGregor, Thos. B., Windsor, Ont.
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
Park Bros., Chatham, Ont.
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
Robertson Machinery Co., Limited, The, Welland, Ont.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
*Stratford Mill Building Co., Limited, The, Stratford, Ont.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
Vulcan Iron Works, Limited, The, Winnipeg, Man.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)
*White, The George, & Sons Co., Limited, London, Ont.
White, R. C., Montreal, Que.

201 BOILERS, Range, Galvanized.

*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Taylor-Forbes Co., Limited, Guelph, Ont.
Toronto Hardware Mfg. Co., Toronto, Ont.

202 BOILERS, Return Tubular.

*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Fleming, James, St. John, N.B.
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Leonard, E., & Sons, London, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
Robertson Machinery Co., Limited, The, Welland, Ont.
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
*Schaake Machine Works, Limited, The, New Westminster, B.C.
*St. John Iron Works, Limited, St. John, N.B.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
Sydney Foundry & Machine Works, Limited, The, Sydney, N.S.
*Vancouver Engineering Works, Limited, Vancouver, B.C.
Vulcan Iron Works, Limited, The, Winnipeg, Man.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)
Weir, J. & R., Montreal, Que.
*White, The George, & Sons Co., Limited, London, Ont.
White, R. C., Montreal, Que.

204 BOILERS, Steam and Hot Water Heating.

*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)
Bell, The Robert, Engine & Thresher Co., Limited, Seaforth, Ont.
*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Brandon Machine Works Co., Limited, Brandon, Man.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Collingwood Shipbuilding Co., Limited, Collingwood, Ont.
Fleming, James, St. John, N.B.
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Leonard, E., & Sons, London, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
McGregor, Thos. B., Windsor, Ont.
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
*Owen Sound Iron Works Co., Limited, The, Owen Sound, Ont.
Park Bros., Chatham, Ont.
Plessisville, La Fonderie de, Plessisville, Que.
*Polson Iron Works, Limited, Toronto, Ont. (Adv. page 1033.)
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
Robertson Machinery Co., Limited, The, Welland, Ont.
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
*Schaake Machine Works, Limited, The, New Westminster, B.C.
*St. John Iron Works, Limited, St. John, N.B.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
Sydney Foundry & Machine Works, Limited, The, Sydney, N.S.
*Vancouver Engineering Works, Limited, Vancouver, B.C.
Vulcan Iron Works, Limited, The, Winnipeg, Man.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)
Weir, J. & R., Montreal, Que.
*White, The George, & Sons Co., Limited, London, Ont.
White, R. C., Montreal, Que.

205 BOILERS, Water Tube.

*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)
*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
Stuart Machinery Co., Limited, The, Winnipeg, Man.

206 BOLSTERS AND TRUCKS, Freight Car.

*Dominion Car & Foundry Co., Limited, Montreal, Que. (Adv. Inside Back Cover.)

207 BOLSTERS, Wagon and Sleigh.

Ackland, D., & Sons, Limited, Winnipeg, Man.
Heard, John, & Co., St. Thomas, Ont.

208 BOLT ENDS.

Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.
*Starr Mfg. Co., Limited, Dartmouth, N.S.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

209 BOLTS, Baby Carriage, Bung Head, Fancy Head, Headless, Hame & Sink.

Morrow, The John, Screw, Limited, Ingersoll, Ont.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

210 BOLTS, Barrel.

Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Taylor-Forbes Co., Limited, Guelph, Ont.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

211 BOLTS, Body Loop.

*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

212 BOLTS, Boiler Patch, Planer, Stud.

Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.
*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
*Clare Bros. & Co., Limited, Preston, Ont.
*Dominion Radiator Co., Limited, The, Toronto, Ont.
*Gies, Philip, Berlin, Ont.
*Gurney Foundry Co., Limited, The, Toronto, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Ives, The H. R., Co., Limited, Montreal, Que.
*Leonard, E., & Sons, London, Ont.
*Longard Bros., Halifax, N.S.
*Pease Foundry Co., Limited, Toronto, Ont.
*Pease-Waldon Co., Limited, Winnipeg, Man.
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
*Shantz, I. E., & Co., Berlin, Ont.
Star Iron Co., Limited, Montreal, Que.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
Taylor-Forbes Co., Limited, Guelph, Ont.
Toronto Furnace & Crematory Co., Limited, Toronto, Ont.
Vulcan Iron Works, Limited, The, Winnipeg, Man.
*Warden King, Limited, Montreal, Que.

205 BOILERS, Water Tube.

*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)
*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
Stuart Machinery Co., Limited, The, Winnipeg, Man.

206 BOLSTERS AND TRUCKS, Freight Car.

*Dominion Car & Foundry Co., Limited, Montreal, Que. (Adv. Inside Back Cover.)

207 BOLSTERS, Wagon and Sleigh.

Ackland, D., & Sons, Limited, Winnipeg, Man.
Heard, John, & Co., St. Thomas, Ont.

208 BOLT ENDS.

Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.
*Starr Mfg. Co., Limited, Dartmouth, N.S.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

209 BOLTS, Baby Carriage, Bung Head, Fancy Head, Headless, Hame & Sink.

Morrow, The John, Screw, Limited, Ingersoll, Ont.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

210 BOLTS, Barrel.

Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Taylor-Forbes Co., Limited, Guelph, Ont.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

211 BOLTS, Body Loop.

*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

212 BOLTS, Boiler Patch, Planer, Stud.

Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.
*Starr Mfg. Co., Limited, Dartmouth, N.S.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

213 BOLTS, Button Head, Bronze & Chuck Bolts.

Morrow, The John, Screw, Limited, Ingersoll, Ont.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

214 BOLTS, Forged.

Brantford Screw Co., Limited, Brantford, Ont. (Adv. page 858.)
*Gurney, Tilden Co., Limited, Hamilton, Ont.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
London Rolling Mill Co., Limited, London, Ont.
*Maritime Nail Co., Limited, St. John, N.B.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Mitchell, The Robt., Co., Limited, Montreal, Que.
Montreal Hardware Mfg. Co., Limited, The, Montreal, Que.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
*Starr Mfg. Co., Limited, Dartmouth, N.S.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)
Vulcan Iron Works, Limited, The, Winnipeg, Man.
*Whitfield, The John, Co., Toronto, Ont.

215 BOLTS, Machine.

Brantford Screw Co., Limited, Brantford, Ont. (Adv. page 858.)
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Canadian Drawn Steel Co., Limited, The, Hamilton, Ont. (Adv. page 1028.)
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
London Rolling Mill Co., Limited, London, Ont.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.
*Starr Mfg. Co., Limited, Dartmouth, N.S.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

216 BOLTS, Milled & Threaded, Bicycle & Automobile.

Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

217 BOLTS, Stove, Tire, Sink, Sleigh, Shoe, Plow, Elevator, Track and Carriage.

Brantford Screw Co., Limited, Brantford, Ont. (Adv. page 858.)
Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
*Canadian Drawn Steel Co., Limited, The Hamilton, Ont. (Adv. page 1028.)
London Rolling Mill Co., Limited, London, Ont.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.
*Starr Mfg. Co., Limited, Dartmouth, N.S.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

218 BOLTS, Window.

Montreal Hardware Mfg. Co., Limited, The, Montreal, Que.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

220 BONE MEAL.

See Meal, Bone.

221 BONES, Cattle.
*Harris Abattoir Co., Limited, The, Toronto, Ont.
Harris, W., & Co., Toronto, Ont.
Marquis, F. Canac, Quebec, Que.

222 BOOKBINDERS.
Armac Press, The, Toronto, Ont.
Brown Bros., Limited, The, Toronto, Ont. (Adv. page 867.)
Bryant Press, Limited, Toronto, Ont.
Buntin, Gillies & Co., Limited, Hamilton, Ont.
*Colonist Printing & Publishing Co., Limited, The, Victoria, B.C.
*Copeland-Chatterson-Crain, Limited, Toronto, Ont.
Copp, Clark Co., Limited, The, Toronto, Ont.
Dawson, Chas. F., Limited, Montreal, Que.
Fleming, The Atwell, Printing Co., Toronto, Ont.
Fortier, Joseph, Montreal, Que.
Hart & Riddell, Toronto, Ont.
Hunter, Rose Co., Limited, The, Toronto, Ont.
Johnston, W. S., & Co., Toronto, Ont.
Lovell, The R. J., Co., Limited, Toronto, Ont.
Lovell, John, & Son, Limited, Montreal, Que.
*McAlpine Publishing Co., Limited, Halifax, N.S.
McLean, R. G., Toronto, Ont. (Adv. page 1035.)
Mail Job Printing Co., Limited, The, Toronto, Ont.
Methodist Book & Publishing House, Toronto, Ont. (Adv. page 1010.)
Miln-Bingham Printing Co., Toronto, Ont.
*Modern Printing Co., The, Montreal, Que.
*Murray Printing Co., Limited, The, Toronto, Ont.
*Paquin, C., & Fils, Montreal, Que.
Patrie Publishing Co., Limited, La, Montreal, Que.
Spectator Printing Co., Limited, The, Hamilton, Ont.
Stovel Co., The, Winnipeg, Man.
Taylor, T. W., Co., Limited, Winnipeg, Man.
*Warwick Bros. & Rutter, Limited, Toronto, Ont.

223 BOOKBINDERS' SUPPLIES.
Brown Bros., Limited, The, Toronto, Ont. (Adv. page 867.)
Buntin, Gillies & Co., Limited, Hamilton, Ont.
*Canadian Bronze Powder Works, The, Montreal, Que.
Fortier, Joseph, Montreal, Que.
*Johnston, H. B., & Co., Toronto, Ont.
*Miller & Richard, Toronto, Ont.
Wickett & Craig, Limited, Toronto, Ont.

224 BOOKCASES.
Berlin Furniture Co., Limited, The, Berlin, Ont.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
*Canadian Office & School Furniture Co., Limited, The, Preston, Ont.
*Globe-Wernicke Co., Limited, The, Stratford, Ont.
*Hibner, The D., Furniture Co., Limited, Berlin, Ont.
*Hourd & Co., Limited, London, Ont.
McLagan, The George, Furniture Co., Limited, Stratford, Ont.
Meaford Mfg. Co., Limited, The, Meaford, Ont.
*Library Bureau of Canada, Limited, Ottawa, Ont. (Adv. page 848.)
Listowel Furniture Co., Limited, Listowel, Ont.
Office Specialty Mfg. Co., Limited, The, Toronto, Ont.
Stratford Chair Co., Limited, The, Stratford, Ont.

225 BOOKCASES, Sectional.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
*Globe-Wernicke Co., Limited, The, Stratford, Ont.
McLagan, The George, Furniture Co., Limited, Stratford, Ont.
Office Specialty Mfg. Co., Limited, The, Toronto, Ont.

226 BOOKLETS.
See Printers, Job.

227 BOOK PUBLISHERS.
See Publishers, Book.

228 BOOKS, Account and Blank.
Brown Bros., Limited, The, Toronto, Ont. (Adv. page 867.)
Buntin, Gillies, & Co., Limited, Hamilton, Ont.
*Carter-Crume Co., Limited, The, Toronto, Ont.
*Colonist Printing & Publishing Co., Limited, The, Victoria, B.C.
*Copeland-Chatterson-Crain, Limited, Toronto, Ont.
Copp, Clark Co., Limited, The, Toronto, Ont.
Davis & Henderson, Toronto, Ont.
Dawson, Chas. F., Limited, Montreal, Que.
Dawson, W. V., & Co., Montreal, Que.
Duncan, Robert, & Co., Hamilton, Ont.
Fortier, Joseph, Montreal, Que.
*Gage, W. J., & Co., Limited, Toronto, Ont.
Grand & Toy, Limited, Toronto, Ont.
Griffin & Richmond Co., Limited, The, Hamilton, Ont.
Guertin Printing Co., The, Montreal, Que.
Hart & Riddell, Toronto, Ont.
Johnston, W. S., & Co., Toronto, Ont.
Librairie Beauchemin, Limited, Montreal, Que.
Lovell, John, & Son, Limited, Montreal, Que.
*Modern Printing Co., The, Montreal, Que.
Mortimer Co., Limited, The, Ottawa, Ont.
Morton, Phillips & Co., Montreal, Que.
*Reason, H. T., & Co., London, Ont.
*Warwick Bros., & Rutter, Limited, Toronto, Ont.

229 BOOKS, Counter Check and Sale.
*Carter-Crume Co., Limited, The, Toronto, Ont.
Merchants' Counter Check Book Co., Limited, Toronto, Ont.
*Morton Co., Limited, The, Toronto, Ont. (Adv. page 852.)
*Reason, H. T., & Co., London, Ont.

230 BOOKS, Guide.
International Railway Publishing Co., Limited, Montreal, Que.

231 BOOKS, Letter Copying.
Brown Bros., Limited, The, Toronto, Ont. (Adv. page 867.)
Buntin, Gillies & Co., Limited, Hamilton, Ont.
Davis & Henderson, Toronto, Ont.
*Gage, W. J., & Co., Limited, Toronto, Ont.
Morton, Phillips & Co., Montreal, Que.
*Warwick Bros. & Rutter, Limited, Toronto, Ont.

232 BOOKS, Manifold.
*Warwick Bros. & Rutter, Limited, Toronto, Ont.

233 BOOT & SHOE STOCK.
See Heels and Heel Stock; Stiffeners and Counters.

234 BOOTS AND SHOES, Canvas.
Dufresne & Locke, Limited, Maisonneuve, Que.

235 BOOTS AND SHOES, Felt and Felt Lined.
Aird & Son, Montreal, Que.
Berlin Felt Boot Co., Limited, Berlin, Ont.
Dufresne & Locke, Limited, Maisonneuve, Que.
Goulet & Garant, Quebec, Que.
*Hartt Boot & Shoe Co., Limited, The, Fredericton, N.B.
Penmans Limited, Paris, Ont. (Adv. page 1063.)

236 BOOTS AND SHOES, Leather.
Aird & Son, Montreal, Que.
*Ames-Holden, Limited, Montreal, Que.
Amherst Boot & Shoe Co., Limited, Amherst, N.S.
Bell, J. & T., Montreal, Que.
*Blouin, J. B., & Fils, Levis, Que. (Adv. page 1006.)
Campbell Shoe Co., Quebec, Que.
*Cook-Fitzgerald Co., Limited, The, London, Ont.
*Corbeil, A., Montreal, Que.
Cote, La Compagnie J. A. & M., St. Hyacinthe, Que.
Daoust, Lalonde & Co., Montreal, Que.
Drolet, J. B., & Co., Quebec, Que.
Dufresne & Locke, Limited, Maisonneuve, Que.
Gauthier, The Louis, Co., Quebec, Que.
Getty & Scott, Limited, Galt, Ont.
Goulet & Garant, Quebec, Que.
Hamilton, W. B., Shoe Co., Limited, Toronto, Ont.
*Hartt Boot & Shoe Co., Limited, The, Fredericton, N.B.
*Higgins, L., & Co., Moncton, N.B.
Jobin & Rochette, Quebec, Que.
Kingsbury Footwear Co., Limited, Montreal, Que.
*Langlois, J. S., & Co., Quebec, Que.
*Leckie, J., & Co., Limited, Vancouver, B.C.
Lennox, John, & Co., Hamilton, Ont.
Linton, James, & Co., Montreal, Que.
McCready, The James, Co., Limited, Montreal, Que.
McPherson, The John, Co., Limited, Hamilton, Ont.
*MacFarlane Shoe Co., Montreal, Que.
*Marsh, The Wm. A., Co., Limited, Quebec, Que.
Minister, Myles Shoe Co., Limited, Toronto, Ont.
Muir, The James, Co., Quebec, Que.
Murray Shoe Co., Limited, The, London, Ont.
Oberholtzer, The G. V., Co., Limited, Berlin, Ont.
Relindo Shoe Co., Limited, Toronto, Ont.
*Ritchie, The John, Co., Limited, Quebec, Que.
*Schryburt, F., & Co., Quebec, Que.
Slater, Geo. A., Montreal, Que.
*Slater Shoe Co., Limited, The, Montreal, Que.
Sterling Bros., Limited, London, Ont.
*Taylor, The Robt., Co., Limited, Halifax, N.S.
*Tebbutt Shoe & Leather Co., Limited, The, Three Rivers, Que.
Tetrault Shoe Co., Montreal, Que.
Tourigny & Marois, Quebec, Que.
Victoria Shoe Co., Limited, The, Toronto, Ont.
*Walker, Parker Co., Limited, The, Toronto, Ont.
Weston Shoe Co., Limited, The, Campbellford, Ont.

237 BOOTS AND SHOES, Rubber.
*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
Granby Rubber Co., Limited, The, Granby, Que.
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)
*Maple Leaf Rubber Co., Limited, The, Port Dalhousie, Ont.
*Merchants' Rubber Co., Limited, The, Berlin, Ont.

238 BORAX.
Nicholson & Brock, Toronto, Ont.
*Sultana Mfg. Co., Montreal, Que.

239 BORING MACHINES.
See Machines, Boring.

240 BOSOMS, Shirt.
Arlington Co., of Canada, Limited, Toronto, Ont.

241 BOTTLERS' SUPPLIES.
Aluminum & Crown Stopper Co., Toronto, Ont.
Ewing, S. H., & Sons, Montreal, Que.
Freyseng Cork Co., Limited, Toronto, Ont.
Hutchinson & Peterson, Toronto, Ont.
*Wilson & Cousins, Toronto, Ont.

242 BOTTLES.
Diamond Flint Glass Co., Limited, Montreal, Que.
*Humphreys Glass Co., Limited, Trenton, N.S.
Sydenham Glass Co., of Wallaceburg, Limited, Wallaceburg, Ont.

243 BOTTLES, Hot Water, Rubber.
*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)

244 BOWLING ALLEYS.
See Beds and Pins, Bowling Alley.

245 BOWLS AND CUPS, Presentation.
Birks, Henry, & Sons, Montreal, Que.
*Ellis, P. W., & Co., Limited, Toronto, Ont. (Adv. page 855.)
Meriden Britannia Co., Limited, Hamilton, Ont.
*Roden Bros., Toronto, Ont. (Adv. page 1048.)
*Toronto Silver Plate Co., Limited, The, Toronto, Ont.

246 BOWS, Carriage.
Ackland, D., & Son, Limited, Winnipeg, Man.
*Canada Wheel Works, Limited, The, Merritton, Ont.
Heard, John, & Co., St. Thomas, Ont.
Hore, F. W., & Son, Limited, Hamilton, Ont.
*Windsor Turned Goods Co., Limited, The, Windsor, Ont.

247 BOXES AND BUSHINGS, Conduit.
*Conduits Co., Limited, Toronto, Ont. (Adv. page 1020.)
*Pringle, The R. E. T., Co., Limited, Montreal, Que.

248 BOXES, Butter.
Barchard & Co., Limited, Toronto, Ont.
*Brunette Saw Mill Co., Limited, New Westminster, B.C.
*Charlemagne & Lac Ouareau Lumber Co., The, Montreal, Que.
*Consumers Box & Lumber Co., Limited, Toronto, Ont.
Cushing Bros., Co., Limited, Calgary, Alta.
*Czerwinski Box Co., Limited, Winnipeg, Man.
Esplin, G. & J., Montreal, Que.
*Firstbrook Box Co., Limited, The, Toronto, Ont.
Kilgour Mfg. Co., Hamilton, Ont.
*Paquet & Godbout, St. Hyacinthe, Que.
*Parry Sound Lumber Co., Limited, The, Toronto, Ont. (Adv. page 1038.)
Rutherford, The Wm., & Sons, Co., Montreal, Que.
*Thomas Bros., Limited, St. Thomas, Ont.

249 BOXES, Cash (Tin).
*Aubry, A., & Fils, Montreal, Que.
Kemp Mfg. Co., Toronto, Ont.
Macdonald Mfg. Co., Limited, Toronto, Ont. (Adv. page 857.)

250 BOXES, Cheese.
*Rider & Kitchener Co., Limited, The, Lindsay, Ont.

251 BOXES, Cigar and Tobacco.
Beck, Adam, London, Ont.
Esplin, G. & J., Montreal, Que.
Meyer-Thomas Co., Limited, The, Montreal, Que.

252 BOXES, Fruit and Berry.
Barchard & Co., Limited, Toronto, Ont.
*Brunette Saw Mill Co., Limited, New Westminster, B.C.
*Canada Wood Specialty Co., Limited, The, Orillia, Ont.
*Consumers Box & Lumber Co., Limited, Toronto, Ont.
Cushing Bros., Co., Limited, Calgary, Alta.
*Czerwinski Box Co., Limited, The, Winnipeg, Man.
Esplin, G. & J., Montreal, Que.
Kilgour Mfg. Co., Hamilton, Ont.
*Ontario Box Co., Limited, The, Hamilton, Ont.
Ontario Fruit Package Co., Limited, Ingersoll, Ont.

253 BOXES, Journal.
Crossen Car Mfg. Co., Limited, The, Cobourg, Ont.

Fleming, James, St. John, N.B.
*Holden, N. J., Co., Limited, Montreal, Que.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Oxford Foundry & Machine Co., Oxford, N.S.
Plessisville, La Fonderie de, Plessisville, Que.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
*Standard Bearings, Limited, Toronto, Ont.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

254 BOXES, Lunch.

Shaw & Mason, Limited, Sydney, N.S.
*Wright, E. T., & Co., Hamilton, Ont.

255 BOXES, Paper, Fancy and Plain.

*Brown, The D. F., Paper Box & Paper Co., Limited, St. John, N.B.
Canada Paper Box Co., Limited, The, Montreal, Que.
Collett, E. B., Toronto, Ont.
Coulter, The J., Co., Limited, Toronto, Ont.
Dominion Corset Co., Quebec, Que.
Dominion Paper Box Co., Limited, Toronto, Ont.
Hamilton Paper Box Co., Hamilton, Ont.
Imperial Paper Box Co., Toronto, Ont.
*Knowles & Co., London, Ont.
*Lawson & Jones, Limited, London, Ont.
Long, A. E., & Co., Limited, Toronto, Ont.
Mace, Geo. A., & Co., Montreal, Que.
Major Mfg. Co., Limited, The, Montreal, Que.
Martin Corrugated Paper & Box Co., Limited, The, Toronto, Ont.
Miller Bros. Co., Limited, The, Montreal, Que.
*Moirs, Limited, Halifax, N.S.
Ontario Paper Box Mfg. Co., Toronto, Ont.
*Pendray, W. J., Victoria, B.C.
*Reason, H. T., & Co., London, Ont.
Royal Paper Box Co., The, Quebec, Que.
*Royal Soap Co., Limited, The, Vancouver, B.C.
*Somerville, C. R., London, Ont.
Telfer Mfg. Co., The, Toronto, Ont. (Adv. page 851.)
Tolton Bros., Limited, Guelph, Ont.

256 BOXES, Paper, Folding.

*Brown, The D. F., Paper Box & Paper Co., Limited, St. John, N.B.
Canada Tag & Label Co., Limited, Montreal, Que.
Dominion Paper Box Co., Limited, Toronto, Ont.
*Duncan Lithographing Co., Limited, The, Hamilton, Ont.
Hamilton Paper Box Co., Hamilton, Ont.
*Howell Lithographing Co., Hamilton, Ont.
*Keenan Bros., Limited, Owen Sound, Ont.
*Knowles & Co., London, Ont.
*Lawson & Jones, Limited, London, Ont.
Long, A. E., & Co., Limited, Toronto, Ont.
Mace, Geo. A., & Co., Montreal, Que.
Major Mfg. Co., Limited, The, Montreal Que.
Martin Corrugated Paper & Box Co., Limited, The, Toronto, Ont.
*Reason, H. T., & Co., London, Ont.
Royal Paper Box Co., The, Quebec, Que.
*Somerville, C. R., London, Ont.
Telfer Mfg. Co., The, Toronto, Ont. (Adv. page 851.)
Tolton Bros., Limited, Guelph, Ont.
Wilson, The J. C., & Co., Limited, Montreal, Que.

257 BOXES, Pencil.

Irwin, R. U., & Son, Horning's Mills, Ont.

258 BOXES, Pill.

*Samson, Joseph, Quebec, Que.

259 BOXES, Smoke.

*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

260 BOXES, Tin.

*Acme Can Works, Montreal, Que.
*Aubry, A., & Fils, Montreal, Que.
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Kemp Mfg. Co., Toronto, Ont.
Macdonald Mfg. Co., Limited, Toronto, Ont. (Adv. page 857.)

261 BOXES, Tin and Cardboard, for Jam, Butter, etc.

*Aubry, A., & Fils, Montreal, Que.
Kemp Mfg. Co., Toronto, Ont.
Macdonald Mfg. Co., Limited, Toronto, Ont. (Adv. page 857.)

262 BOXES, Wood, Printed.

Barchard & Co., Limited, Toronto, Ont.
*Consumers Box & Lumber Co., Limited, Toronto, Ont.
Esplin, G. & J., Montreal, Que.
*Firstbrook Box Co., Limited, Toronto, Ont.
Kilgour Mfg. Co., Hamilton, Ont.
*Parry Sound Lumber Co., Limited, The, Toronto, Ont. (Adv. page 1038.)
Rutherford, The Wm., & Sons Co., Montreal, Que.

263 BOXES, Wooden, Packing and Shook.

Aitchison, D., & Co., Hamilton, Ont.
*Andre Cushing & Co., St. John, N.B. (Adv. page 852.)
Anglin, S., & Co., Kingston, Ont.
Barchard & Co., Limited, Toronto, Ont.
British Columbia Canning Co., Limited, Victoria, B.C.
*B. C. Mills Timber & Trading Co., Vancouver, B.C.
*Brunette Saw Mill Co., Limited, New Westminster, B.C.
*Carew, John, Lindsay, Ont.
*Charlemagne & Lac Ouareau Lumber Co., The, Montreal, Que.
*Consumers Box & Lumber Co., Limited, Toronto, Ont.
Cushing Bros., Co., Limited, Calgary, Alta.
*Czerwinski Box Co., Limited, The, Winnipeg, Man.
Davidson, James, Ottawa, Ont.
Dyment-Baker Lumber Co., The, London, Ont.
Esplin, G. & J., Montreal, Que.
*Firstbrook Box Co., Limited, The, Toronto, Ont.
Georgian Bay Shook Mills, Limited, Midland, Ont.
Gignac, J. H., Limited, Quebec, Que.
*Gilmour Door Co., Limited, The, Trenton Ont.
*Gravel, The A., Lumber Co., Limited, Etchemin Bridge, Que.
*Heaps, E. H., & Co., Vancouver, B.C. (Adv. page 850.)
Hill Mfg. Co., The, Quebec, Que.
Kerr, J. & J., Co., Limited, Petrolia, Ont.
Kilgour Mfg. Co., Hamilton, Ont.
*Moirs Limited, Halifax, N.S.
*Murray & Gregory, Limited, St. John, N.B.
Nesbitt, E. T., Quebec, Que.
*Ontario Box Co., Limited, The, Hamilton, Ont.
*Paquet & Godbout, St. Hyacinthe, Que.
*Parry Sound Lumber Co., Limited, The, Toronto, Ont. (Adv. page 1038.)
Rathbun Co., The, Deseronto, Ont.
Rat Portage Lumber Co., Limited, The, Kenora, Ont.
Rutherford, The Wm., & Sons Co., Montreal, Que.
*Sayward, J. A., Victoria, B.C.
*Schultz Bros., Co., Limited, The, Brantford, Ont.
*Sutherland, Innes Co., Limited, The, Chatham, Ont. (Adv. page 856.)
Wilson Bros., Limited, Collingwood, Ont.
Wilson, The Geo., Building & Contracting Co., Limited, St. Catharines, Ont.

264 BRACES.

See Suspenders, etc.

265 BRACES, Carpenters'.

*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

266 BRACKETS, Brass.

*Garth Co., The, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Standard Brass Mfg. Co., Limited, Sarnia, Ont.

267 BRACKETS, Electric Pole.

*Lachute Shuttle Co., Limited, The, Lachute Mills, Que.
McGregor & McIntyre, Limited, Toronto, Ont.
*Page-Hersey Iron, Tube & Lead Co., Limited, Toronto, Ont.
Shantz, P. E., Preston, Ont.

268 BRACKETS, Iron (Cast).

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)
*Garth Co., The, Montreal, Que.
*Meadows, The Geo. B., Toronto, Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Taylor-Forbes Co., Limited, Guelph, Ont.
Toronto Hardware Mfg. Co., Toronto, Ont.

269 BRACKETS, Iron, for Stables.

Taylor-Forbes Co., Limited, Guelph, Ont.
Toronto Hardware Mfg. Co., Toronto, Ont.
*Warden King, Limited, Montreal, Que.

270 BRACKETS, Metal.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Dunn, J. A., & Co., Halifax, N.S.
Ives, The H. R., Co., Limited, Montreal, Que.
*McAvity, T., & Sons, St. John, N.B.
*McDougall, The R., Co., of Galt, Limited, Galt, Ont. (Adv. page 1019.)
McGregor & McIntyre, Limited, Toronto, Ont.
*Meadows, The Geo. B., Toronto, Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Mitchell, The Robert Co., Limited, Montreal, Que.
Taylor-Forbes Co., Limited, Guelph, Ont.
Toronto Hardware Mfg. Co., Toronto, Ont.
*Warden King, Limited, Montreal, Que.

271 BRACKETS, Morris Chair (Brass).

*Hahn Brass Co., Limited, The, New Hamburg, Ont.

272 BRACKETS, Wood.

Anglin, S., & Co., Kingston, Ont.
Clark, W. H., & Co., Limited, Edmonton, Alta.
Cushing Bros., Co., Limited, Calgary, Alta.
Lemon, Gonnason & Co., Victoria, B.C.
Rathbun Co., The, Deseronto, Ont.

273 BRADS, Iron, Brass and Copper.

Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)

274 BRAIDS, Fancy and Military.

Cascade Narrow Fabric Co., Coaticook, Que.
Dominion Cord & Tassel Co., The, Montreal, Que.
Moulton & Co., Montreal, Que.
*Peters, J. Henry, Co., Toronto, Ont.

275 BRAIDS, Silk.

Cascade Narrow Fabric Co., Coaticook, Que.
*Corticelli Silk Co., Limited, Montreal, Que.

276 BRAKE BEAMS.

*Dominion Car & Foundry Co., Limited, Montreal, Que. (Adv. Inside Back Cover.)

277 BRAKES, Air.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Westinghouse Co., Limited, Hamilton, Ont.

278 BRAKES, Railway Car.

Mitchell, The Robt., Co., Limited, Montreal, Que.

279 BRAN.

See Feeds.

280 BRANDS, Burning.

Hamilton Stamp & Stencil Works, Limited, Hamilton, Ont.
*Montreal Stencil Works, Montreal, Que. (Adv. page 1032.)
*Patterson & Heward, Toronto, Ont.
*Superior Mfg. Co., The, Toronto, Ont. (Adv. page 866.)
Toronto Stamp & Stencil Works, Toronto, Ont.
Walker & Campbell, Montreal, Que.

281 BRANDY.

*Hamilton, J. S., & Co., Brantford, Ont.

282 BRASS FOUNDERS.

See Founders, Brass, and Castings, Brass.

283 BRASS GOODS, Plumbers' and Steamfitters.

Beauport, La Cie Brasserie de, Beauport, Que.
Bennett & Wright Co., Limited, The, Toronto, Ont.
*Canadian Brass Mfg. Co., Limited, The, Galt, Ont.
Canadian Wolverine Co., Limited, Chatham, Ont.
*Chadwick Bros., Hamilton, Ont.
*Cuthbert, W. R., & Co., Montreal, Que.
Empire Mfg. Co., Limited, London, Ont.
Fleck, Alexander, Limited, Ottawa, Ont.
*Garth Co., The, Montreal, Que.
General Brass Works, Limited, The, Toronto, Ont.
*Hamilton Brass Mfg. Co., Limited, The, Hamilton, Ont.
Hughes, J. W., & Son, Montreal, Que.
Jenkins Bros., Limited, Montreal, Que.
*Keith & Fitzsimons Co., Limited, The, Toronto, Ont.
*Kerr Engine Co., Limited, The, Walkerville, Ont. (Adv. page 1033.)
Labatt Mfg. Co., Limited, The, London, Ont.
*McAvity, T., & Sons, St. John, N.B.
*Mechanics Supply Co., Quebec, Que.
Mitchell, The Robt., Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Penberthy Injector Co., Limited, Windsor, Ont. (Adv. page 865.)
Robertson, The James, Co., Limited, Montreal, Que.
Somerville, Limited, Toronto, Ont. (Adv. Outside Back Cover.)
Standard Brass Mfg. Co., Limited, Sarnia, Ont.
*Standard Contracting Co., Limited, Toronto, Ont.
*Warden King, Limited, Montreal, Que.

284 BRASS, Pig.

*Frankel Bros., Toronto, Ont.
Syracuse Smelting Works, Montreal, Que.

285 BRASS, Sheet.

*Canada Brass Rolling Mills, Limited, Toronto, Ont.
*Garth Co., The, Montreal, Que.

286 BRASS WORK, Architectural.

*Jenking Brass Mfg. Co., Limited, Montreal, Que.
*Keith & Fitzsimons Co., Limited, The, Toronto, Ont.
*Parkin Elevator Co., Limited, The, Hespeler, Ont.
Toronto Brass Mfg. Co., Toronto, Ont.

287 BRASS WORK, Confectioners'.

Booth Copper Co., Limited, The, Toronto, Ont.
*Chadwick Bros., Hamilton, Ont.
*Coulter, Wm., & Sons, Toronto, Ont.

288 BRASSES, Journal.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Crossen Car Mfg. Co., of Cobourg, Limited, The, Cobourg, Ont.
*Cuthbert, W. R., & Co., Montreal, Que.
*Garth Co., The, Montreal, Que.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Mitchell, The Robt., Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Rhodes, Curry & Co., Limited, Amherst, N.S.
Robertson, The James, Co., Limited, Montreal, Que.
*Skinner Co., Limited, The, Gananoque, Ont.

289 BRASSES, Memorial.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Patterson & Heward, Toronto, Ont.
Toronto Brass Mfg. Co., Toronto, Ont.

290 BREAD.

Boyd, The W. J., Candy Co., Winnipeg, Man.
Bredin Bread Co., Limited, Toronto, Ont.
Hethrington, T., Quebec, Que.
Lees, Wm., & Son, Hamilton, Ont.
Lynch Bros., Dolan Co., Limited, Sydney, N.S.
McLauchlan & Sons Co., Limited, Owen Sound, Ont.
Nasmith Co., Limited, The, Toronto, Ont.
Parnell-Dean Steam Baking Co., Limited, The, London, Ont.

291 BREAKERS, Stone and Ore.

See Crushers, Ore and Rock.

292 BREAKFAST FOODS.

See Cereals.

293 BREWERS.

See Ale and Lager Beer.

294 BREWERS' SUPPLIES.

Ewing, S. H., & Sons, Montreal, Que.
Freyseng Cork Co., Limited, Toronto, Ont.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

295 BRICK, Boiler Tube.

Montreal Fire Brick Works, The, Montreal, Que.

296 BRICK, Building.

*Bechtels, Limited, Waterloo, Ont.
Composite Brick Co., Limited, Regina, Sask.
Don Valley Brick Works, Toronto, Ont.
Haileybury Brick & Tile Co., Limited, Haileybury, Ont.
Indestructible Brick, Limited, Toronto, Ont.
Laprairie Brick Co., Limited, The, Montreal, Que.
Maloney, John, & Co., Toronto, Ont.
Milton Pressed Brick Co., Limited, Milton, Ont.
*Paquet & Godbout, St. Hyacinthe, Que.
Terra Cotta Pressed Brick Co., Limited, The, Toronto, Ont.
Toronto Pressed Brick & Terra Cotta Works, Milton, Ont.
Webb, John E., Toronto, Ont.

297 BRICK, Fire, Stove and Cupola.

*Belleville Pottery Co., Belleville, Ont.
Campbell's Sons, R., Hamilton, Ont.
Hamilton & Toronto Sewer Pipe Co., Limited, The, Hamilton, Ont.
Hamilton Facing Mill Co., Limited, Hamilton, Ont.
Maloney, John, & Co., Toronto, Ont.
Montreal Fire Brick Works, The, Montreal, Que.
*Standard Drain Pipe Co., of St. Johns, Que., Limited, The, St. Johns, Que. (Adv. page 854.)

298 BRICK, Pressed.

Don Valley Brick Works, Toronto, Ont.
Terra Cotta Pressed Brick Co., Limited, The, Toronto, Ont.

299 BRICK, Sand Lime.

Indestructible Brick, Limited, Toronto, Ont.
*Schultz Bros. Co., Limited, The, Brantford, Ont.

300 BRICK, Street, Paving and Sidewalk.

Laprairie Brick Co., Limited, The, Montreal, Que.

301 BRICK, Terra Cotta.

Terra Cotta Pressed Brick Co., Limited, The, Toronto, Ont.
Toronto Pressed Brick & Terra Cotta Works, Milton, Ont.

302 BRICKMAKERS' SUPPLIES.

See Machinery, Brick, Tile and Clay.

303 BRIDGES, Iron and Steel, Railway and Highway.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Bridge Co., Limited, The, Walkerville, Ont. (Adv. page 1044.)
Dickson Bros. Co., Limited, Campbellford, Ont.
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843.)
Fleming, James, St. John, N.B.
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Lyall, P., & Sons, Montreal, Que.
McNeil, W. P., & Co., New Glasgow, N.S.
Phoenix Bridge & Iron Works, Limited, The, Montreal, Que.
Stratford Bridge & Iron Works Co., Stratford, Ont.

304 BRONZE, Lumen.

Lumer Bearing Co., West Toronto, Ont. (Adv. page 1031.)

305 BRONZE, Phosphor.

Canada Metal Co., Limited, The, Toronto, Ont. (Adv. page 869.)
*Cuthbert, W. R., & Co., Montreal, Que.
Mitchell, The Robt., Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited. Toronto, Ont. (Adv. page 1029.)
Syracuse Smelting Works, Montreal, Que.

306 BRONZE POWDER.

See Powder, Bronze.

307 BROOMS.

*Meakins & Sons, Hamilton, Ont.
Meakins Brush Co., Limited, Montreal, Que.
*Nelson, H. W., & Co., Limited, Toronto, Ont. (Adv. page 1044.)
*Simms, T. S., & Co., Limited, St. John, N.B.
*Skedden Brush Co., Limited, Hamilton, Ont.
*Stevens-Hepner Co., Limited, Port Elgin, Ont.
*Thomas Bros., Limited, St. Thomas, Ont.
United Factories, Limited, Toronto, Ont. (Adv. page 1023.)

308 BROOMS, Stable.

*Stevens-Hepner Co., Limited, Port Elgin, Ont.
United Factories, Limited, Toronto. (Adv. page 1023.)

309 BROUGHAMS & VICTORIAS.

See Carriages.

310 BRUSH BACKS.

See Backs and Blocks, Brush.

311 BRUSHES.

*Dominion Brush & Mirror Co., Limited, West Toronto, Ont.
*Meakins & Sons, Hamilton, Ont.
Meakins Brush Co., Limited, Montreal, Que.
*Simms T. S., & Co., Limited, St. John, N.B.
*Skedden Brush Co., Limited, Hamilton, Ont.
*Stevens-Hepner Co., Limited, Port Elgin, Ont.
*Thomas Bros., Limited, St. Thomas, Ont.
*United Factories, Limited, Toronto Ont. (Adv. page 1023.)

312 BRUSHES, Carbon.

Canadian General Electric Co., Limited, Toronto, Ont.

313 BRUSHES, Painters.

*Meakins & Sons, Hamilton, Ont.
Meakins Brush Co., Limited, Montreal, Que.
*Simms, T. S., & Co., Limited, St. John, N.B.
*Skedden Brush Co., Limited, Hamilton, Ont.
*Thomas Bros., Limited, St. Thomas, Ont.
*United Factories, Limited, Toronto, Ont. (Adv. page 1023.)

314 BRUSHES, Stable.

*Meakins & Sons, Hamilton, Ont.
*Simms, T. S., & Co., Limited, St. John, N.B.
*Stevens-Hepner Co., Limited, Port Elgin, Ont.
*Thomas Bros., Limited, St. Thomas, Ont.
*United Factories, Limited, Toronto, Ont. (Adv. page 1023.)

315 BRUSHES, Steel & Wire.

Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
Hamilton Facing Mill Co., Limited, Hamilton, Ont.
Meakins Brush Co., Limited, Montreal, Que.

316 BUCKETS, Coal, Dredge and Ore.

Allis-Chalmers-Bullock, Limited, Montreal, Que.
Beatty, M., & Sons, Limited, Welland, Ont (Adv. page 864.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page, 827.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

317 BUCKETS, Steel Galvanized.

*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Kemp Mfg. Co., Toronto, Ont.

318 BUCKETS, Wood.

Eddy, The E. B., Co., Limited, Hull, Que.
United Factories, Limited, Toronto, Ont. (Adv. page 1023.)

319 BUCKLES.

*McKinnon Dash & Metal Works Co., Limited, St. Catharines, Ont. (Adv. page 826.)
*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv page 1024.)

320 BUCKRAMS.

*Smart Bag Co., Limited, The, Montreal, Que. (Adv. page 836.)

321 BUFFETS.

Hespeler Furniture Co., Limited, The, Hespeler, Ont.
*Hibner, The D., Furniture Co., Limited, Berlin, Ont.
Meaford Mfg. Co., Limited, Meaford, Ont.
*Windsor Furniture Co., Limited, Windsor, N.S.
World Furnishing Co., Limited, The, Orillia, Ont.

322 BUG KILLER.

Alabastine Co., Limited, The, Paris, Ont.

323 BUGGIES.

See Carriages.

324 BUILDING MATERIAL, (Granite)

See Marble and Granite Building Material

325 BUILDING MATERIAL, Sheet Metal.

Galt Art Metal Co., Limited, The, Galt, Ont. (Adv. page 1034.)
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.

326 BUILDINGS, Steel.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Bridge Co., Limited, The, Walkerville, Ont.
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)

327 BULBS, Rubber.

*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)

328 BULLION, Gold, Silver and Copper.

Granby Consolidated Mining, Smelting, & Power Co., Limited, Grand Forks, B.C.
*Hall Mining & Smelting Co., Limited, Nelson, B.C.

329 BULLION, Lead.

*Consolidated Mining & Smelting Co., of Canada, Limited, Trail, B.C., (Adv. page 1026.)
*Hall Mining & Smelting Co., Limited, Nelson, B.C.

330 BUMPERS AND SPRINGS, Rubber,

See Springs, Rubber.

331 BUOYS, Gas.

*International Marine Signal Co., Limited, Ottawa, Ont.

332 BUOYS, Iron and Steel.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

333 BUOYS AND RINGS, Life.
See Preservers, life.

334 BURLAP, Decorators' Prepared.
Dominion Oil Cloth Co., Limited, The, Montreal, Que.

335 BURLAP, for Hooked Rugs.
*Garrett, John E., New Glasgow, N.S.

336 BURLAPS, Plain and Sized.
*Smart Bag Co., Limited, The, Montreal, Que. (Adv. page 836.)

337 BURNERS, Acetylene Gas.
*Shawinigan Carbide Co., Limited, The, Montreal, Que. (Adv. page 832.)
*Steward, D. M., Mfg. Co., of Canada, Limited, Toronto, Ont.

338 BURNERS, Gas, Lamp and Lantern.
Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
*Garth Co., The, Montreal, Que.
Kemp Mfg. Co., Toronto, Ont.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Ontario Lantern and Lamp Co., Limited, Hamilton, Ont. (Adv. page 830.)
Schultz Mfg. Co., Limited, The, Hamilton, Ont.

339 BURNERS, Incandescent Gas.
*Auer Incandescent Light Mfg. Co., Limited, Montreal, Que.

340 BURNERS, Refuse.
Canadian Buffalo Forge Co., Limited, Montreal, Que.
Fleming, James, St. John, N.B.
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.

341 BURNERS, Stereopticon.
*Siche Gas Co., Limited, The, Toronto, Ont.

342 BURRS.
Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)

343 BUSTLES.
Crompton Corset Co., Limited, Toronto, Ont.

344 BUTTER.
Canada Condensed Milk Co., Limited, Antigonish, N.S.
City Dairy Co., Limited, Toronto, Ont.
*Fearman, F. W., Co., Limited, Hamilton, Ont.
*Georgian Bay Milling & Power Co., Limited, Meaford, Ont.
*Gunn's, Limited, Toronto, Ont.
*Matthews, The George, Co., Limited, Peterboro, Ont.
*Smith & Proctor, Halifax, N.S.
Whyte Packing Co., Limited, The, Stratford, Ont.

345 BUTTER, in Tins and Jars.
Smith & Proctor, Halifax, N.S.

346 BUTTER WORKERS.
*Richardson, C., & Co., St. Mary's Ont. (Adv. page 1063.)
Taylor-Forbes Co., Limited, Guelph, Ont.
*Wortman & Ward Co., Limited, The, London, Ont.

347 BUTTONS, Barrel.
Dominion Cord & Tassel Co., The, Montreal, Que.
*Greef-Bredt & Co., Toronto, Ont.
Moulton & Co., Montreal, Que.
*Peters, J. Henry, Co., Toronto, Ont.

348 BUTTONS, Cloth Covered.
*Greef-Bredt & Co., Toronto, Ont.

349 BUTTONS, Ivory & Pearl.
Berlin Button Works, Limited, The, Berlin, Ont.
*Berlin Suspender & Button Co., Limited, The, Berlin, Ont.
Roschman, Richard, & Bro., Waterloo, Ont.
Shantz, The Jacob Y., & Son Co., Limited, Berlin, Ont.

349a BUTTONS, Metal.
*Scully, William, Montreal, Que.

350 BUTTONS, Pant & Overall.
Berlin Button Works, Limited, The, Berlin, Ont.
*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)

351 BUTTS.
Cowan & Britton, Gananoque, Ont.
Esplin, G. & J., Montreal, Que.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Montreal Hardware Mfg. Co., Limited, The, Montreal, Que.
Peterboro Lock Mfg. Co., Limited, The, Peterboro, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

C

352 CABINET WORK.
See Cabinets and Furniture.

353 CABINETS, Book and Catalogue.
See Bookcases.

354 CABINETS, Card Index.
*Globe-Wernicke Co., Limited, The, Stratford, Ont.
Office Specialty Mfg. Co., Limited, Toronto, Ont.

355 CABINETS, Fancy.
Berlin Furniture Co., Limited, The, Berlin, Ont.
Burton & Baldwin Mfg. Co., Limited, The, Hamilton, Ont.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
Castle & Son, Montreal, Que.
Clatworthy & Son, Toronto, Ont.
*Coulter, The J., Co., Limited, Toronto, Ont.
Gibbard Furniture Co., of Napanee, Limited, The, Napanee, Ont.
*Goderich Organ Co., Limited, The, Goderich Ont.
Hespeler Furniture Co., Limited, The, Hespeler, Ont.
*Hibner, The D., Furniture Co., Limited, Berlin, Ont.
*Hubbard, The C. H., Co., Limited, Toronto, Ont.
McLagan, The George, Furniture Co., Limited, Stratford, Ont.
*Malcolm & Souter Furniture Co., Limited, Hamilton, Ont.
Meaford Mfg. Co., Limited, The, Meaford, Ont.
*Paquet & Godbout, St. Hyacinthe, Que.
Randall, G. H., & Co., Montreal, Que.
*Sexton & Co., Limited, Toronto, Ont.
World Furnishing Co., Limited, The, Orillia, Ont.

356 CABINETS, Filing.
*Canadian Office & School Furniture Co., Limited, The, Preston, Ont.
*Globe-Wernicke Co., Limited, The, Stratford, Ont.
*Library Bureau of Canada, Limited, Ottawa, Ont. (Adv. page 848.)
Office Specialty Mfg. Co., Limited, Toronto, Ont.

357 CABINETS, Fireproof, Motor and Moving Picture Machine.
*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)

358 CABINETS, Kitchen.
*Campbell, The Manson Co., Limited, Chatham, Ont.
*Hourd & Co., Limited, London, Ont.
Listowel Furniture Co., Limited, The, Listowel, Ont.
Meaford Mfg. Co., Limited, The, Meaford, Ont.
World Furnishing Co., Limited, The, Orillia, Ont.

359 CABINETS, Map.
Hendry, The Geo. M., Co., Limited, Toronto, Ont.

360 CABINETS, Medicine and Sewing Machine.
*Hay & Co., Woodstock, Ont.
*Hourd & Co., Limited, London, Ont.
Meaford Mfg. Co., Limited, The, Meaford, Ont.
*Williams Mfg. Co., Limited, The, Montreal, Que. (Adv. page 1037.)

361 CABINETS, Metallic.
*Eclipse Mfg. Co., Limited, The, Ottawa, Ont.
Office Specialty Mfg. Co., Limited, Toronto, Ont.

362 CABLES, Cableway.
*Dominion Wire Rope Co., Limited, Montreal, Que. (Adv. page 1026.)
*Parkin Elevator Co., Limited, The, Hespeler, Ont.

363 CABLES, Electric, Telegraph and Telephone.
Canadian General Electric Co., Limited, Toronto, Ont.
Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
*Dominion Wire Rope Co., Limited, Montreal, Que. (Adv. page 1026.)
*Phillips, Eugene F., Electrical Works, Limited, Montreal, Que.
*Wilson, James, Merritton, Ont.
Wire & Cable Co., The, Montreal, Que. (Adv. page 1033.)

364 CABLES, Hemp, Manilla, etc.
*Consumers Cordage Co., Limited, Montreal, Que.

365 CABLES, Railway Ballast.
Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
*Dominion Wire Rope Co., Limited, Montreal, Que. (Adv. page 1026.)
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
*Parkin Elevator Co., Limited, The, Hespeler, Ont.
*Wilson, James, Merritton, Ont.

366 CABLEWAYS.
Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.

367 CAGES, Bird.
Kemp Mfg. Co., Toronto, Ont.
*Wright, E. T., & Co., Hamilton, Ont.

368 CAGES, Mine.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

369 CAKE, Linseed.
See Oil Cake, Linseed.

370 CAKE, Salt and Nitre.
Nichols Chemical Co., of Canada, Limited, The, Montreal, Que. (Adv. page 1045.)

371 CALCIUM CARBIDE.
See Carbide of Calcium.

372 CALCULAGRAPHS.
*Northern Electric & Mfg. Co., Limited, The, Montreal, Que. (Adv. page 842.)

373 CALENDARS.
See Lithographers or Printers, Job.

374 CALKS, Boot, Lumbermen's Driving.
Canada Screw Co., Limited, The, Hamilton, Ont. (Adv. page 1024.)

375 CALKS, Horseshoe.
*Gilmour Bros. & Co., Montreal, Que.
*Pender, James, & Co., Limited, St. John, N.B.

376 CAMERAS.
Canadian Kodak Co., Limited, Toronto, Ont. (Adv. page 1030.)

377 CAMPING OUTFITS AND SUPPLIES.
See Awnings and Tents and Bags, Camping, etc.

378 CAMS.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

379 CANDLES.
Canadian Oil Co., Limited, Toronto, Ont.
Imperial Oil Co., Limited, The, Montreal, Que.
Queen City Oil Co., Limited, The, Toronto, Ont. (Adv. page 1028.)
St. Johns Straw Works Co., Limited, St. Johns, Que.

380 CANNED FISH.
See Fish.

381 CANNED FRUIT.
See Fruit, Canned.

382 CANNED MEAT.
See Meat, Canned.

383 CANNED VEGETABLES.
See Vegetables, Canned.

384 CANOES.
*Chestnut Canoe Co., Limited, Fredericton, N.B.
*Dean, Walter, Toronto, Ont.
English, The Wm., Canoe Co., Peterborough, Ont.
*Gidley, H. E., & Co., Penetanguishene Ont.
*Peterborough Canoe Co., Limited, The, Peterboro, Ont.
*Ross, Henry, Indian Lorette, Que.

385 CANS, Grocers'.
*Acme Can Works, Montreal, Que.
Emerson & Fisher, Limited, St. John, N.B.
Kemp Mfg. Co., Toronto, Ont.
*Kemp Mfg. & Metal Co., Limited, The, Winnipeg, Man.
Macdonald Mfg. Co., Limited, Toronto, Ont. (Adv. page 857.)
Norton Mfg. Co., Hamilton, Ont.
*Sanitary Can Co., Limited, Niagara Falls, Ont.

386 CANS (Key Opening).
*Acme Can Works, Montreal, Que.

387 CANS (Milk, Factory and Railway).
*Acme Can Works, Montreal, Que.
Aubry, A., & Fils, Montreal, Que.
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)
Norton Mfg. Co., Hamilton, Ont.

*Richardson, C. & Co., St. Mary's, Ont. (Adv. page 1063.)
Stevely, Wm., & Son, London, Ont.

388 CANS, Oil, Household.
Emerson & Fisher, Limited, St. John, N.B.
Kemp Mfg. Co., Toronto, Ont.
Macdonald Mfg. Co., Limited, Toronto, Ont. (Adv. page 857.)

389 CANS, Oil Waste, Galvanized.
Kemp Mfg. Co., Toronto, Ont.
*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)
Wheeler & Bain, Toronto, Ont.

390 CANS, Paint.
*Whittall, A. R., Montreal, Que.

391 CANS, Special.
*Acme Can Works, Montreal, Que.
Kemp Mfg. Co., Toronto, Ont.
*Kemp Mfg. & Metal Co., Limited, The, Winnipeg, Man.

392 CANS, Tin, Fruit, Vegetable, Meat, Syrup, Baking Powder, etc.
*Acme Can Works, Montreal, Que.
Aubry, A., & Fils, Montreal, Que.
Grimm Mfg. Co., The, Montreal, Que.
Kemp Mfg. Co., Toronto, Ont.
*Kemp Mfg. & Metal Co., Limited, The, Winnipeg, Man.
Macdonald Mfg. Co., Limited, Toronto, Ont. (Adv. page 857.)
Norton Mfg. Co., Hamilton, Ont.
*Sanitary Can Co., Limited, Niagara Falls, Ont.
*Whittall, A. R., Montreal, Que.

393 CANTHOOKS.
See Hooks, Cant.

394 CANVAS.
Imperial Cotton Co., Limited, Hamilton, Ont.
Montreal Cotton Co., Valleyfield, Que.

395 CANVAS, Tailors' Coat Collar.
*Smart Bag Co., Limited, The, Montreal, Que. (Adv. page 836.)

396 CAPS, Bathing (Rubber).
*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)

397 CAPS, Blasting.
Ontario Powder Co., Limited, Kingston, Ont.

398 CAPS, Cloth.
Ansley, A., & Co., Toronto, Ont.
*Bruce Mfg. Co., Toronto, Ont.
*Eastern Hat & Cap Mfg. Co., Limited, Truro, N.S.
Fraser, F. C., & Co., London, Ont.
Greene, Swift & Co., London, Ont.
*Hastings, T. W., Cap Mfg. Co., London, Ont.
*Hudson Bay Knitting Co., The, Montreal, Que.
Maritime Hat & Cap Co., The, Truro, N.S.
*Peck, John W., & Co., Limited, Montreal, Que. (Adv. page 837.)
*Punchard, Chas. C., & Co., Toronto, Ont.
Swift, Copland & Co., Limited, Montreal, Que.
Waldron, Drouin Co., Limited, Montreal, Que.

399 CAPS, Fruit Jar.
Ontario Lantern & Lamp Co., Limited, Hamilton, Ont. (Adv. page 830.)

400 CAPS, Fur.
Allan, A. A., & Co., Toronto, Ont.
Boulter, Waugh & Co., Limited, Montreal, Que.
*Brereton & Manning, Toronto, Ont.
Dechene & Paulin, Quebec, Que.
*Holt, Renfrew & Co., Quebec, Que.
*Laliberte, J. B., Quebec, Que.
Orr, Wm. E., & Co., Toronto, Ont.
Swift, Copland & Co., Limited, Montreal, Que.
Waldron, Drouin Co., Limited, Montreal, Que.

401 CAPS, Knit.
Forbes, The R., Co., Limited, Hespeler, Ont.
*Universal Knitting Co., Limited, The, Toronto, Ont.

402 CAPS, Leather.
Fraser, F. C., & Co., London, Ont.
*Hudson Bay Knitting Co., The, Montreal, Que.

402a CAPS AND HELMETS, Uniform.
Scully, William, Montreal, Que.

403 CAPES, Rubber.
*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)

404 CAPSTANS, Ship.
*Doty Engine Works Co., Limited, The, Goderich, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Polson Iron Works, Limited, Toronto, Ont. (Adv. page 1033.)
Windsor Foundry & Machine Co., Limited, Windsor, N.S.

405 CAPSULES.
Ewing, S. H., & Sons, Montreal, Que.
Freyseng Cork Co., Limited, Toronto, Ont.
Frosst, Chas. E., & Co., Montreal, Que.
*Parke, Davis & Co., Walkerville, Ont.

406 CARBIDE OF CALCIUM.
*Shawinigan Carbide Co., Limited, The, Montreal, Que. (Adv. page 832.)
*Willson Carbide Co., Limited, St. Catharines, Ont.

407 CARBONATED GOODS.
See Water, Aerated.

408 CARBONATORS.
Aluminum & Crown Stopper Co., Toronto, Ont.
Fletcher Mfg. Co., Limited, Toronto, Ont.
*McLaughlin, J. J., Limited, Toronto, Ont.

409 CARBONS, Electric Light.
Canadian General Electric Co., Limited, Toronto, Ont.

410 CARBURETORS.
*Chadwick Bros., Hamilton, Ont.

411 CARDBOARD.
Canada Coating Mills, Limited, Georgetown, Ont.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
Jonquiere Pulp Co., The, Jonquiere, Que.
Ritchie & Ramsay, Limited, Toronto, Ont.
*Smith, The Howard, Paper Co., Limited, Montreal, Que.

412 CARDS, Index and Filing.
Davis & Henderson, Toronto, Ont.
Duncan, Robert, & Co., Hamilton, Ont.
*Globe-Wernicke Co., Limited, The, Stratford, Ont.
Johnston, W. S., & Co., Toronto, Ont.
Office Specialty Mfg. Co., Limited, Toronto, Ont.

413 CARDS, Jewelry.
*Coulter, The J., Co., Limited, Toronto, Ont.
Long, A. E., & Co., Limited, Toronto, Ont.

414 CARDS, Playing.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
Copp, Clark Co., Limited, The, Toronto, Ont.
*Montreal Lithographing Co., Limited, The, Montreal, Que. (Adv. page 855.)

415 CARDS, Sample.
Canada Paper Box Co., Limited, Montreal, Que.
Collett, E. B., Toronto, Ont.
Imperial Paper Box Co., Toronto, Ont.
Mace, Geo. A., & Co., Montreal, Que.

416 CARDS, Show.
*Benallack Lithographing & Printing Co., The, Montreal, Que.
Bulman Bros., Limited, Winnipeg, Man.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
Grip, Limited, Toronto, Ont. (Adv. page 1025.)
*Harris Lithographing Co., The, Toronto, Ont.
*Howell Lithographing Co., Hamilton, Ont.
London Printing & Lithographing Co., The, London, Ont.
*Martel Stewart Co., Limited, The, Montreal, Que.
*Rolph & Clark, Limited, Toronto, Ont. (Adv. page 998.)
*Smith, The David, Engraving & Lithographing Co., Toronto, Ont.
*Toronto Lithographing Co., Limited, The, Toronto, Ont.

417 CARPET FELT.
See Felt, Carpet.

418 CARPET LININGS.
See Linings, Carpet.

419 CARPETS, Axminster, Brussels, Ingrain, Smyrna, Wilton
Canadian Axminster Co., Limited, The, Hamilton, Ont.
Guelph Carpet Mills Co., Limited, The, Guelph, Ont.
Toronto Carpet Mfg. Co., Limited, Toronto, Ont.

420 CARPETS, Carriage, Church, Lodge, Railway, Steamer, etc.
Canadian Axminster Co., Limited, The, Hamilton, Ont.
Guelph Carpet Mills Co., Limited, The, Guelph, Ont.
Toronto Carpet Mfg. Co., Limited, Toronto, Ont.

421 CARRIAGE BODIES IN THE WHITE.
*Armstrong, The J. B., Mfg. Co., Limited, Guelph, Ont. (Adv. page 996.)
Conboy Carriage Co., Limited, The, Toronto, Ont.
*Gray, The Wm., & Sons Co., Limited, Chatham, Ont.
*Guelph Carriage Top Co., Guelph, Ont.

422 CARRIAGE PARTS.
Ackland, D., & Son, Limited, Winnipeg, Man.
Conboy Carriage Co., Limited, The, Toronto, Ont.
*Guelph Carriage Top Co., Guelph, Ont.
Heard, John, & Co., St. Thomas, Ont.
Hore, F. W., & Son, Limited, Hamilton, Ont.
*Scott, R., & Son, Limited, Galt, Ont. (Adv. page 843.)
*Skinner Co., Limited, The Gananoque, Ont.
*Windsor Turned Goods Co., Limited, The, Windsor, Ont.

423 CARRIAGE TOPS.
*Armstrong, The J. B., Mfg. Co., Limited, Guelph, Ont. (Adv. page 996.)
Conboy Carriage Co., Limited, The, Toronto, Ont.
*Guelph Carriage Top Co., Guelph, Ont.

424 CARRIAGES.
*Armstrong, The J. B., Mfg. Co., Limited, Guelph, Ont. (Adv. page 996.)
*Berard & Major, Montreal, Que.
*Borland Carriage Co., Limited, The, Stratford, Ont.
Boyce Carriage Co., The, Winnipeg, Man.
*Brantford Carriage Co., Limited, The, Brantford, Ont.
Brown, S., Toronto, Ont.
*Canada Carriage Co., The, Brockville, Ont.
Conboy Carriage Co., Limited, The, Toronto, Ont.
*Dominion Carriage Co., Limited, West Toronto, Ont. (Adv. page 861.)
Granby Carriage Co., The, Granby, Que.
*Gray, The Wm., & Sons Co., Limited, Chatham, Ont.
Greer, A. B., London, Ont.
*Heney, E. N., Co., Limited, Montreal, Que.
Hutchinson & Son, Toronto, Ont.
Lariviere, The A. C., Co., Montreal, Que.
Ledoux Carriage Co., Limited, The, Montreal, Que.
*Lochrie, James, Toronto, Ont.
McKie, The R., Buggy Co., Plattsville, Ont.
*McLaughlin Carriage Co., Limited, Oshawa, Ont.
*Mount Forest Carriage Co., Limited, The, Mount Forest, Ont.
*Munro & McIntosh Carriage Co., Limited, The, Alexandria, Ont.
Truro Carriage Co., Truro, N.S.
*Tudhope Carriage Co., Limited, The, Orillia, Ont.
Whitaker, Wm., & Sons, Oakville, Ont.

425 CARRIAGES, Baby, Reed and Rattan.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)
Giddings, H. & F., & Co., Granby, Que.
Imperial Rattan Co., Limited, Walkerville, Ont. (Adv. page 1034.)
Smith, J. E., & Co., Truro, N.S.

426 CARRIAGES, Saw Mill.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Plessisville, La Fonderie de, Plessisville, Que.
*Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861.)

427 CARRIAGES & GO-CARTS, Doll.
Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)

428 CARRIERS, Hay, Feed and Grain.
Allith Mfg. Co., Limited, Hamilton, Ont.
*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852.)
*Louden Machinery Co., Guelph, Ont.
*McFarlane-Neill Mfg. Co., Limited, St. Mary's, N.B.
Tolton Bros., Limited, Guelph, Ont.

429 CARRIERS, Litter.
*Louden Machinery Co., Guelph, Ont.

430 CARS, Dump.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Crossen Car Mfg. Co., of Cobourg, Limited, The, Cobourg, Ont.
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Marsh & Henthorn, Belleville, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
*Toronto Pressed Steel Co., Limited, The, Toronto, Ont.

Western Iron Works, Limited, Winnipeg, Man.

431 CARS, Electric.

Ahearn & Soper, Limited, Ottawa, Ont.
*Canada Car Co., Limited, Montreal, Que.
Crossen Car Mfg. Co., of Cobourg, Limited, The, Cobourg, Ont.
Preston Car & Coach Co., Limited, The, Preston, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.

432 CARS, Elevator.

See Elevators, Factory, Etc.

433 CARS, Hand.

*Bessette, La Cie J. & S., Ltee., Iberville, Que.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Crossen Car Mfg. Co., of Cobourg, Limited, The, Cobourg, Ont.
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Hamilton Facing Mill Co., Limited, Hamilton, Ont.
Marsh & Henthorn, Belleville, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.

434 CARS, Lumber, Brick and Tile Drying.

Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Sheldons, Limited, Galt, Ont. (Adv. page 859.)

435 CARS, Mining.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
*Brown Machine Co., The, New Glasgow, N.S.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Crossen Car Mfg. Co., of Cobourg, Limited, The, Cobourg, Ont.
*Cumming, J. W., New Glasgow, N.S.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
*Vancouver Engineering Works, Limited, Vancouver, B.C.
Western Iron Works, Limited, Winnipeg, Man.

436 CARS, Motor.

See Automobiles.

437 CARS, Mud.

*Doig, A. E., & Co., Toronto, Ont.
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)

438 CARS, Oil Tank.

Canada Foundry Co., Limited, Toronto, Ont.
Crossen Car Mfg. Co., of Cobourg, Limited, The, Cobourg, Ont.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

439 CARS, Passenger, Parlor, Vestibule, Sleeping, Freight and Refrigerator.

*Canada Car Co., Limited, Montreal, Que.
Crossen Car Mfg. Co., of Cobourg, Limited, The, Cobourg, Ont.
*Cumming Mfg. Co., Limited, The, Renfrew, Ont.
*Dominion Car & Foundry Co., Limited, Montreal, Que. (Adv. Inside Back Cover.)
Preston Car & Coach Co., Limited, Preston, Ont.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.

440 CARS, Railway Motor.

*Canada Cycle & Motor Co., Limited, West Toronto, Ont. (Adv. opp. Inside Back Cover.)

441 CARTONS, Spice & Jelly Powder.

*Harris Lithographing Co., The, Toronto, Ont.

442 CARTRIDGES.

*Dominion Cartridge Co., Limited, Montreal, Que.

443 CARTS.

See Carriages.

444 CARTS, Dump.

Adams Wagon Co., Limited, Brantford, Ont.
*Bain Wagon Co., Limited, The, Woodstock, Ont.
Chatham Wagon Co., Limited, The, Chatham, Ont.
*Jennings, A., & Co., Montreal, Que.
*Petrolia Wagon Co., Limited, Petrolia, Ont.
Sawyer & Massey Co., Limited, Hamilton, Ont.
*Toronto Pressed Steel Co., Limited, The, Toronto, Ont.
*Wilkinson Plow Co., Toronto, Ont.
Woodstock Wagon & Mfg. Co., Limited, The, Woodstock, Ont.

445 CARTS, Hand.

Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)
Ledoux Carriage Co., Limited, The, Montreal, Que.

446 CARTS, Rapid Delivery.

Freeman, The W. A., Co., Limited, Hamilton, Ont.

447 CASE GOODS.

See Furniture.

448 CASES, Egg.

Barchard & Co., Limited, Toronto, Ont.
Cushing Bros., Co., Limited, Calgary, Alta.
*Czerwinski Box Co., Limited, The, Winnipeg, Man.
Esplin, G. & J., Montreal, Que.
*Gilmour Door Co., Limited, The, Trenton, Ont.

449 CASES, Jewelry.

*Coulter, The J., Co., Limited, Toronto, Ont.
*Ellis, P. W., & Co., Limited, Toronto, Ont. (Adv. page 855.)

450 CASES, Leather (Dressing, Fancy, Shaving, Toilet, Etc.)

Brown Bros., Limited, The, Toronto, Ont. (Adv. page 867.)
*Coulter, The J., Co., Limited, Toronto, Ont.
*Eveleigh, J., & Co., Limited, Montreal, Que.
*General Leather Goods, Limited, Toronto, Ont.
Kellys, Limited, Halifax, N.S.
Sale, The Julian, Leather Goods Co., Limited, Toronto, Ont.
Trunk & Leather Goods Co., Toronto, Ont.
*Young Bros., Toronto, Ont.

451 CASES FOR MUSICAL INSTRUMENTS.

*Whaley, Royce & Co., Limited, Toronto, Ont.
Williams, The R. S., & Sons Co., Limited, Toronto, Ont.

452 CASES, Packing.

See Boxes, Wooden, Packing and Shook.

453 CASES, Piano.

Sherlock-Manning Organ Co., The, London, Ont.

454 CASES, Sample (Leather).

*Christie Bros., & Co., Limited, Amherst, N.S. (Adv. page 1057.)
*Lamontagne Limited, Montreal, Que.
*Langmuir, The M., Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. page 1056.)

455 CASES, Shipping.

See Boxes, Wooden, Packing and Shook.

456 CASES, Show.

*Berlin Interior Hardwood Co., Limited, The, Berlin, Ont.
Brunswick-Balke-Collender Co., Toronto, Ont.
Burton & Baldwin Mfg. Co., Limited, The, Hamilton, Ont.
Christie Woodworking Co., Limited, The, St. John, N.B.
Clatworthy & Son, Toronto, Ont.
Cushing Bros., Co., Limited, Calgary, Alta.
Dominion Office & Store Fitting Co., Limited, London, Ont.
Gignac, Beland & Cie, Quebec, Que.
Hadley, The S., Lumber Co., Limited, Chatham, Ont.
*Jones Bros., & Co., Limited, Toronto, Ont.
Knight Bros., Co., Limited, The, Burk's Falls, Ont.
Long, The Geo., Co., Limited, Sherbrooke, Que.
Murray, G. W., Co., Limited, Winnipeg, Man.
Piggott, J., & Sons, Chatham, Ont.
Reardon, Frank, Halifax, N.S.
Spencer Bros., & Turner, Limited, Truro, N.S.
Weiler Bros., Victoria, B.C.

457 CASES, Suit.

See Telescope and Suit Cases.

458 CASINGS, Pork, Sausage and Bologna.

Freeman, The W. A., Co., Limited, Hamilton, Ont.
Gallagher-Hull Meat & Packing Co., Limited, The, Edmonton, Alta.
Harris, W., & Co., Toronto, Ont.

459 CASINGS, Wood.

Cushing Bros., Co., Limited, Calgary, Alta.
*Heaps, E. H., & Co., Vancouver, B.C. (Adv. page 850.)
Robinson-McKenzie Lumber Co., Limited, Cranbrook, B.C.
*Terminal Lumber & Shingle Co., Limited, The, Vancouver, B.C.

460 CASKETS AND COFFINS.

*Christie Bros. & Co., Limited, Amherst, N.S. (Adv. page 1057.)
*Elliott, James S., & Son, Prescott, Ont.
*Girard & Godin, Three Rivers, Que.
*Globe Casket Co., The, London, Ont.
*National Casket Co., Toronto, Ont.
Semmens & Evel Casket Co., Limited, The, Hamilton, Ont.
Thompson, The D. W., Co., Limited, Toronto, Ont.

461 CASKETS AND COFFINS, Metallic.

*Girard & Godin, Three Rivers, Que.
*Globe Casket Co., The, London, Ont.

462 CASTERS, Furniture.

Ives, The H. R., Co., Limited, Montreal, Que.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

463 CASTINGS, Aluminum.

Canada Metal Co., Limited, The, Toronto, Ont. (Adv. page 869.)
*Cuthbert, W. R., & Co., Montreal, Que.
*Gies, Philip, Berlin, Ont.
Lumen Bearing Co., West Toronto, Ont. (Adv. page 1031.) page 1043.)
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Niagara Falls Machine & Foundry Co., Limited, Niagara Falls, Ont. (Adv. page 1028.)
*Tallman, J. N., & Sons, Hamilton, Ont.

464 CASTINGS, Brass.

Beauport, La Cie Brasserie de, Quebec, Que.
Belleville Hardware Co., Limited, The, Belleville, Ont.
Canada Metal Co., Limited, The, Toronto, Ont. (Adv. page 869.)
*Canadian Iron & Foundry Co., Limited, Montreal, Que. (Adv. page 827.)
*Chadwick Bros., Hamilton, Ont.
Crossen Car Mfg. Co., of Cobourg, Limited, The, Cobourg, Ont.
*Cuthbert, W. R. & Co., Montreal, Que.
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)
Empire Mfg. Co., Limited, London, Ont.
Fleck, Alexander, Limited, Ottawa, Ont.
Fleming, Jamen, St. John, N.B.
*Garth Co., The, Montreal, Que.
*Gies, Philip, Berlin, Ont.
*Hahn Brass Co., Limited, The, New Hamburg, Ont.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Keith & Fitzsimons Co., Limited, The, Toronto, Ont.
*Kerr Engine Co., Limited, The, Walkerville, Ont. (Adv. page 1033.)
Labatt Mfg. Co., Limited, London, Ont.
Lumen Bearing Co., West Toronto, Ont. (Adv. page 1031.)
*McAvity, T., & Sons, St. John, N.B.
*McKinnon Dash & Metal Works Co., Limited, St. Catharines, Ont. (Adv. page 826.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Mitchell, The Robert, Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
*New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
Niagara Falls Machine & Foundry Co., Limited, Niagara Falls, Ont. (Adv. page 1028.)
Ontario Lantern & Lamp Co., Limited, Hamilton, Ont. (Adv. page 830.)
*Owen Sound Iron Works Co., Limited, The, Owen Sound, Ont.
Plessisville, La Fonderie de, Plessisville, Que.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
Skinner Co., Limited, The, Gananoque, Ont.
Somerville, Limited, Toronto, Ont. (Adv. Outside Back Cover.).
*Tallman, J. N., & Sons, Hamilton, Ont.
Taylor-Forbes Co., Limited, Guelph, Ont.
Toronto Brass Mfg. Co., Toronto, Ont.
Shaw & Mason, Limited, Sydney, N.S.
Vulcan Iron Works, Limited, The, Winnipeg, Man.
*Wilson, J. C., & Co., Glenora, Ont.
*Wilson & Cousins, Toronto, Ont.
Windsor Foundry & Machine Co., Limited, Windsor, N.S.

465 CASTINGS, Bridge.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843.)
Fleck, Alexander, Limited, Ottawa, Ont.
Fleming, James, St. John, N.B.
Fraser Bros., New Glasgow, N.S.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.

Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Mount Royal Foundry Co., Limited, The, Montreal, Que.
Norsworthy, C., & Co., St. Thomas, Ont.
Parker Foundry Co., Limited, Montreal, Que.
Robertson Machinery Co., Limited, The, Welland, Ont.
Western Iron Works, Limited, Winnipeg, Man.

466 CASTINGS, Bronze.

Belleville Hardware Co., Limited, The, Belleville, Ont.
*Chadwick Bros., Hamilton, Ont.
*Cuthbert, W. R., & Co., Montreal, Que.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Lumen Bearing Co., West Toronto, Ont. (Adv. page 1031.)
*McKinnon Dash & Metal Works, Co., Limited, St. Catharines, Ont. (Adv. page 826.)
Mitchell, The Robert, Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Niagara Falls Machine & Foundry Co., Limited, Niagara Falls, Ont. (Adv. page 1028.)
*Tallman, J. N., & Sons, Hamilton, Ont.
Taylor-Forbes Co., Limited, Guelph, Ont.

467 CASTINGS, Building and Store Front.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Canadian Iron & Foundry Co., Limited, Montreal, Que. (Adv. page 827.)
Fleck, Alexander, Limited, Ottawa, Ont.
Fleming, James, St. John, N.B.
Fraser Bros., New Glasgow, N.S.
*Gies, Philip, Berlin, Ont.
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Hillis & Sons, Limited, Halifax, N.S.
London Foundry Co., Limited, The, London, Ont.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Mount Royal Foundry Co., Limited, The, Montreal, Que.
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
Norsworthy, C., & Co., St. Thomas, Ont.
Oxford Foundry & Machine Co., Oxford, N.S.
Parker Foundry Co., Limited, Montreal, Que.
Robertson Machinery Co., Limited, The, Welland Ont.
Vulcan Iron Works, Limited, The, Winnipeg, Man.
Watson, John, & Son, Montreal, Que.
Western Iron Works, Limited, Winnipeg, Man.

468 CASTINGS, Carriage and Agricultural Implement.

Fleck, Alexander, Limited, Ottawa, Ont.
Fleming, James, St. John, N.B.
Fraser Bros., New Glasgow, N.S.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
*McKinnon Dash & Metal Works Co., Limited, St. Catharines, Ont. (Adv. page 826.)
*Mount Royal Foundry Co., Limited, The, Montreal, Que.
*Ontario Malleable Iron Co., Limited, The, Oshawa, Ont.
Parker Foundry Co., Limited, Montreal, Que.
Pratt & Letchworth Co., Brantford, Ont.
Shantz, P. E., Preston, Ont.
Smith's Falls Malleable Castings Co., Limited, Smith's Falls, Ont.
Taylor-Forbes Co., Limited, Guelph, Ont.
Walkerville Malleable Iron Co., Limited, Walkerville, Ont.

469 CASTINGS, Copper.

*Chadwick Bros., Hamilton, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
*Tallman, J. N., & Sons, Hamilton, Ont.

470 CASTINGS, Furnace.

*Amherst Foundry Co., Limited, Amherst, N.S. (Adv. page 849.)
Fleck, Alexander, Limited, Ottawa, Ont.
Fleming, James, St. John, N.B.
Fraser Bros., New Glasgow, N.S.
*Gies, Philip, Berlin, Ont.
Guelph Stove Co., Limited, Guelph, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
London Foundry Co., Limited, The, London, Ont.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
Parker Foundry Co., Limited, Montreal, Que.
Plessisville, La Fonderie de, Plessisville, Que.
Robertson Machinery Co., Limited, The, Welland, Ont.
Star Iron Co., Limited, Montreal, Que.
Taylor-Forbes Co., Limited, Guelph, Ont.

471 CASTINGS, Grey Iron.

*Belanger, A., Montmagny, Que.
*Bell, B., & Son Co., Limited, St. George, Ont.
Belleville Hardware Co., Limited, The, Belleville, Ont.
Bowmanville Foundry Co., Limited, The, Bowmanville, Ont.
Dickson Bros. Co., Limited, Campbellford, Ont.
*Dodge Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
Fleck, Alexander, Limited, Ottawa, Ont.
Fleming, James, St. John, N.B.
Fraser Bros., New Glasgow, N.S.
*Gies, Philip, Berlin, Ont.
*Gilson Mfg. Co., Limited, Guelph, Ont.
Guelph Stove Co., Limited, Guelph, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Kerr & Coombes Foundry Co., Limited, Hamilton, Ont.
*Kerr Engine Co., Limited, The, Walkerville, Ont. (Adv. page 1033.)
Kennedy, The Wm., & Sons, Limited, Owen Sound, Ont.
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044.)
London Foundry Co., Limited, The, London, Ont.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
New Burrell-Johnston Iron Co., Limited, The, Yarmouth, N.S.
Niagara Falls Machine & Foundry Co., Limited, Niagara Falls, Ont. (Adv. page 1028.)
Norsworthy, C., & Co., St. Thomas, Ont.
*Ontario Malleable Iron Co., Limited, The, Oshawa, Ont.
Ottawa Steel Casting Co., Limited, Ottawa, Ont.
*Owen Sound Iron Works Co., Limited, The, Owen Sound, Ont.
Oxford Foundry & Machine Co., Oxford. N.S.
Parker Foundry Co., Limited, Montreal, Que.
*Parkin Elevator Co., Limited, The, Hespeler, Ont.
Plessisville, La Fonderie de, Plessisville, Que.
Richardson, C., & Co., St. Mary's, Ont. (Adv. page 1063.)
Robertson Machinery Co., Limited, The, Welland, Ont.
*Shantz, I. E., & Co., Berlin, Ont.
*Stevens Co., of Galt, Limited, The, Galt, Ont. (Adv. page 1003.)
Stewart, The James, Mfg. Co., Limited, Woodstock, Ont.
Taylor-Forbes Co., Limited, Guelph, Ont.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.
Western Iron Works, Limited, Winnipeg, Man.
*Williams Mfg. Co., Limited, The, Montreal, Que. (Adv. page 1037.)

472 CASTINGS, Iron (Agricultural).

*Bell, B., & Son, Co., Limited, St. George, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Galt Malleable Iron Co., Limited, Galt, Ont. (Adv. page 1027.)
Gartshore-Thomson Pipe & Foundry Co., Limited, The, Hamilton, Ont.
London Foundry Co., Limited, The, London, Ont.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
Norsworthy, C., & Co., St. Thomas, Ont.
Parker Foundry Co., Limited, Montreal, Que.
Pratt & Letchworth Co., Brantford, Ont.
Shantz, P. E., Preston, Ont.
Walkerville Malleable Iron Co., Limited, Walkerville, Ont.
Watson, John, & Son, Montreal, Que.

473 CASTINGS, Iron (Heavy).

Amesse, P., Montreal, Que.
*Amherst Foundry Co., Limited, Amherst, N.S. (Adv. page 849.)
Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864.)
*Belanger, A., Montmagny, Que.
*Canada Car Co., Limited, Montreal, Que.
*Canadian Iron & Foundry Co., Limited, Montreal, Que. (Adv. page 827.)
*Collingwood Shipbuilding Co., Limited, Collingwood, Ont.
Crossen Car Mfg. Co., of Cobourg, Limited, The, Cobourg, Ont.
Fleck, Alexander, Limited, Ottawa, Ont.
Fleming, James, St. John, N.B.
Fraser Bros., New Glasgow, N.S.
*Garth Co., The, Montreal, Que.
Gartshore-Thomson Pipe & Foundry Co., Limited, The, Hamilton, Ont.
*Gies, Philip, Berlin, Ont.
*Goldie & McCulloch Co., Limited, Galt, Ont. (Adv. page 833.)
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Kennedy, The Wm., & Sons, Limited, Owen Sound, Ont.
*Kerr Engine Co., Limited, The, Walkerville, Ont. (Adv. page 1033.)
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044.)
*Leonard, E., & Sons, London, Ont.
*Letson & Burpee, Limited, Vancouver, B.C.
London Foundry Co., Limited, The, London, Ont.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
McLean, Holt & Co., St. John, N.B.
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Mount Royal Foundry Co., Limited, The, Montreal, Que.
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
Norsworthy, C., & Co., St. Thomas, Ont.
*Owen Sound Iron Works Co., Limited, Owen Sound, Ont.
Oxford Foundry & Machine Co., Oxford, N.S.
Parker Foundry Co., Limited, Montreal, Que.
Plessisville, La Fonderie de, Plessisville, Que.
Reid & Brown, Toronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
Stratford Bridge & Iron Works Co., Stratford, Ont.
Vulcan Iron Works, Limited, The, Winnipeg, Man.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)
Watson, John, & Son, Montreal, Que.
Western Iron Works, Limited, Winnipeg, Man.
*Wilson, James, Merritton, Ont.
*Wilson, J. C., & Co., Glenora, Ont.
Williams, The Madison, Mfg. Co., Limited, Lindsay, Ont.

474 CASTINGS, Light.

Belleville Hardware Co., Limited, The, Belleville, Ont.
Bowmanville Foundry Co., Limited, The, Bowmanville, Ont.
Fleck, Alexander, Limited, Ottawa, Ont.
Fleming, James, St. John, N.B.
Fraser Bros., New Glasgow, N.S.
Gartshore-Thomson Pipe & Foundry Co., Limited, Hamilton, Ont.
*Gies, Philip, Berlin, Ont.
*Gilson Mfg. Co., Limited, Guelph, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044.)
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
*McAvity, T., & Sons, St. John, N.B.
New Burrell-Johnson Iron Co., Limited, Yarmouth, N.S.
Norsworthy, C., & Co., St. Thomas, Ont.
Parker Foundry Co., Limited, Montreal, Que.
Plessisville, La Fonderie de, Plessisville, Que.
Shantz, P. E., Preston, Ont.
*Standard Ideal Co., Limited, The, Port Hope, Ont. (Adv. pages 873 and 874.)
Stewart, The James Mfg. Co., Limited, Woodstock, Ont.
Taylor-Forbes Co., Limited, Guelph, Ont.
Western Iron Works, Limited, Winnipeg, Man.

475 CASTINGS, Malleable Iron.

*Galt Malleable Iron Co., Limited, Galt, Ont. (Adv. page 1027.)
*International Harvester Co., of Canada, Limited, Hamilton, Ont. (Adv. page 848.)
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
*McKinnon Dash & Metal Works Co., Limited, St. Catharines, Ont. (Adv. page 826.)
*Maxwell, David, & Sons, St. Mary's, Ont.
*Ontario Malleable Iron Co., Limited, The, Oshawa, Ont.
Pratt & Letchworth Co., Brantford, Ont.
Smith's Falls Malleable Castings Co., Limited, Smith's Falls, Ont.
Walkerville Malleable Iron Co., Limited, Walkerville, Ont.

476 CASTINGS, Manhole.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)

*Canadian Iron & Foundry Co., Limited, Montreal, Que. (Adv. page 827.)
*Brown Machine Co., The, New Glasgow, N.S.
*Garth Co., The, Montreal, Que.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
London Foundry Co., Limited, The, London, Ont.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Norsworthy, C., & Co., St. Thomas, Ont.
Parker Foundry Co., Limited, Montreal, Que.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)
Western Iron Works, Limited, Winnipeg, Man.

477 CASTINGS, Railway.

*Canada Car Co., Limited, Montreal, Que.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Canadian Ramapo Iron Works, Limited, Niagara Falls, Ont. (Adv. page 1021.)
Fleck, Alexander, Limited, Ottawa, Ont.
*Galt Malleable Iron Co., Limited, Galt, Ont. (Adv. page 1027.)
*Gilson Mfg. Co., Limited, Guelph, Ont.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041.)
Manitoba Iron Works, Limited, Winnipeg, Man.
Oxford Foundry & Machine Co., Oxford, N.S.
Parker Foundry Co., Limited, Montreal, Que.
Pratt & Letchworth Co., Brantford, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Smith's Falls Malleable Castings Co., Limited, Smith's Falls, Ont.
Walkerville Malleable Iron Co., Limited, Walkerville, Ont.
Western Iron Works, Limited, Winnipeg, Man.

478 CASTINGS, Semi-Steel.

Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Stevens Co., of Galt, Limited, The, Galt, Ont. (Adv. page 1003.)

479 CASTINGS, Sewer.

*Brown Machine Co., The, New Glasgow, N.S.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Canadian Iron & Foundry Co., Limited, Montreal, Que. (Adv. page 827.)
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Norsworthy, C., & Co., St. Thomas, Ont.
*Richardson, C., & Co., St. Mary's, Ont. (Adv. page 1063.)
Robertson Machinery Co., Limited, The, Welland, Ont.
*Standard Ideal Co., Limited, Port Hope, Ont. (Adv. pages 873 and 874.)
Western Iron Works, Limited, Winnipeg, Man.

480 CASTINGS, Ship.

Canadian Shipbuilding Co., Limited, Toronto, Ont.
*Collingwood Shipbuilding Co., Limited, Collingwood, Ont.
Fleck, Alexander, Limited, Ottawa, Ont.
Fraser Bros., New Glasgow, N.S.
Kennedy, The Wm., & Sons, Limited, Owen Sound, Ont.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
Parker Foundry Co., Limited, The, Montreal, Que.
*Polson Iron Works, Limited, Toronto, Ont. (Adv. page 1033.)
Record Foundry & Machine Co., Moncton, N.B.
*Schaake Machine Works, Limited, The, New Westminster, B.C.
Windsor Foundry & Machine Co., Limited, Windsor, N.S.

481 CASTINGS, Steel.

Kennedy, The Wm., & Sons, Limited, Owen Sound, Ont.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041.)
Ottawa Steel Casting Co., Limited, Ottawa, Ont.

482 CASTINGS, Water Works.

*Kerr Engine Co., Limited, The, Walkerville, Ont. (Adv. page 1033.)
London Foundry Co., Limited, The, London, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
Norsworthy, C., & Co., St. Thomas, Ont.
Oxford Foundry & Machine Co., Oxford, N.S.
*Richardson, C., & Co., St. Mary's, Ont.
Robertson Machinery Co., Limited, The, Welland, Ont.
Western Iron Works, Limited, Winnipeg, Man.

483 CATALOGUES.

See Printers, Job.

484 CATCHES, Cupboard.

Belleville Hardware Co., Limited, The, Belleville, Ont.

485 CATSUPS.

See Sauces and Catsups.

486 CAULDRONS.

*Amherst Foundry Co., Limited, Amherst, N.S. (Adv. page 849.)
*Belanger, A., Montmagny, Que.
*Gurney Foundry Co., Limited, The, Toronto, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

487 CEILINGS, Metal and Steel.

Galt Art Metal Co., Limited, The, Galt, Ont. (Adv. page 1034.)
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995.)
*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.
*Riddell, John E., Hamilton, Ont.

488 CEILINGS, Wood.

See Lumber, or Mills, planing.

489 CELLS, Prison and Jail.

Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)
McGregor & McIntyre, Limited, Toronto, Ont.

490 CEMENT, Asbestos, Furnace and Plastic.

*Canadian Asbestos Co., Montreal, Que.
Eureka Mineral Wool & Asbestos Co., Toronto, Ont. (Adv. page 1012.)
*Garlock Packing Co., The, Hamilton, Ont.
Hamilton Engine Packing Co., Hamilton, Ont.
*Moore, Benjamin, & Co., Limited, West, Toronto, Ont.
*Sterne, G. F., & Sons, Brantford, Ont.

491 CEMENT, Jewelers'.

Murphy, Bruce, Orillia, Ont.

492 CEMENT, Leather Belting.

*Sadler & Haworth, Montreal, Que. (Adv. page 1002.)

493 CEMENT, Portland.

Alberta Portland Cement Co., Limited, Calgary, Alta. (Adv. page 1045.)
Belleville Portland Cement Co., Limited, Belleville, Ont.
Canadian Portland Cement Co., Limited, The, Toronto, Ont.
Colonial Portland Cement Co., Limited, The, Wiarton, Ont.
Grey & Bruce Portland Cement Co., of Shallow Lake, Limited, The, Owen Sound, Ont.
Hanover Portland Cement Co., Limited, The, Hanover, Ont.
*Imperial Cement Co., Limited, The, Owen Sound, Ont.
International Portland Cement Co., Limited, The, Ottawa, Ont.
Lakefield Portland Cement Co., The, Montreal, Que.
*Lehigh Portland Cement Co., Limited, Belleville, Ont. (Adv. page 1034.)
Morgan, Thos. M., Longue Point, Que.
National Portland Cement Co., Limited, The, Durham, Ont.
Ontario Portland Cement Co., Limited, The, Brantford, Ont.
Owen Sound Portland Cement Co., Limited, The, Owen Sound, Ont.
Sun Portland Cement Co., Limited, The, Owen Sound, Ont.
*Sydney Cement Co., Limited, Sydney, N.S.
*Vancouver Portland Cement Co., Limited, The, Victoria, B.C.
*Vulcan Portland Cement Co., Limited, Montreal, Que. (Adv. page 1057.)
*Western Canada Cement & Coal Co., Limited, The, Ottawa, Ont.
Western Ontario Portland Cement Co., Limited, The, Atwood, Ont.

494 CEMENT, Roofing.

*Dominion Tar & Chemical Co., Limited, The, Sydney, N.S.
Forbes Roofing Co., Toronto, Ont.
*McArthur, Alex., & Co., Limited, Montreal, Que. (Adv. page 1040.)
Paterson Mfg. Co., Limited, The, Toronto, Ont.

495 CEMENT, Rubber.

*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
Domestic Specialty Co., Limited, Hamilton, Ont.
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)
*Fisk, Limited, Montreal, Que.
*Gutta Percha & Rubber Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. Inside Back Inner Cover.)
Richard & Co., Quebec, Que.

496 CEMENT, Stove.

*Scarfe & Co., Brantford, Ont.
*Sterne, G. F., & Sons, Brantford, Ont.

497 CEREALS.

*Brackman-Ker Milling Co., Limited, The, Victoria, B.C. (Adv. page 1042.)
*Campbell, The John, Co., Limited, St. Thomas, Ont.
Canada Flour Mills Co., Limited, Chatham, Ont.
*Canadian Cereal Co., Limited, Toronto, Ont.
*Cereals, Limited, Kingston, Ont.
*Greig, The Robert, Co., Limited, Toronto, Ont.
*McCann, Knox, Milling Co., Limited, Toronto, Ont.
*McIntosh, P., & Son, Toronto, Ont.
Malta Vita Pure Food Co., Toronto, Ont.
*Noble, Robert, Norval, Ont.
*Ogilvie Flour Mills Co., Limited, The, Montreal, Que.
*Quaker Oats Co., The, Peterboro, Ont.
*Thomson, Walter, & Son, Limited, London, Ont.
*Tillson Co., Limited, The, Tillsonburg, Ont.
*Woodstock Cereal Co., Limited, The, Woodstock, Ont.

497a CERTIFICATES, Bond and Share.

*American Bank Note Co., Ottawa, Ont.
*Benallack Lithographing & Printing Co., The, Montreal, Que.
British American Bank Note Co., Limited, Ottawa, Ont. (Adv. page 1017.)
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
Copp, Clark Co., Limited, The, Toronto, Ont.
London Printing & Lithographing Co., The, London, Ont.
*Rolph & Clark, Limited, Toronto, Ont. (Adv. page 998.)
*Smith, The David, Engraving & Lithographing Co., Toronto, Ont.

498 CHAINS, Boom, Log and Saw Mill.

*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*McFarlane-Neill Mfg. Co., Limited, The, St. Mary's, N.B.
*Pink, Thomas, Pembroke, Ont.
*Standard Chain Company, of Canada, Limited, Sarnia, Ont.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

499 CHAINS, Breast, Cow, Dog, Halter, Trace, etc.

Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
*McKinnon Dash & Metal Works Co., Limited, St. Catharines, Ont. (Adv. page 826.)
Oneida Community, Limited, Niagara Falls, Ont.
*Standard Chain Company of Canada, Limited, Sarnia, Ont.

500 CHAIN, Jack.

Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)

501 CHAIN, Malleable detachable.

*Ontario Malleable Iron Co., Limited, The, Oshawa, Ont.

502 CHAINS, Silver and Gold.

See Jewelry.

503 CHAINS, Sprocket.

*Belanger, A., Montmagny, Que.
*Canada Cycle & Motor Co., Limited, West Toronto, Ont. (Adv. opp. Inside Back Cover.)
*McKinnon Dash & Metal Works Co., Limited, St. Catharines, Ont. (Adv. page 826.)

504 CHAINS, Wire.

Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)

505 CHAIRS, Assembly Hall, Church & Lodge Room.

*Canadian Office & School Furniture Co., Limited, Preston, Ont.
*Globe Furniture Co., Limited, The, Walkerville, Ont. (Adv. page 865.)
*Knechtel Furniture Co., Limited, The, Hanover, Ont.
*North American Bent Chair Co., Limited, The, Owen Sound, Ont. (Adv. page 1030.)
*Paquet & Godbout, St. Hyacinthe, Que.

*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042.)

506 CHAIRS, Barbers'.

*Bawden Machine & Tool Co., Toronto, Ont.
*Jones Bros. & Co., Limited, Toronto, Ont.

507 CHAIRS, Bent Wood.

*North American Bent Chair Co., Limited, The, Owen Sound, Ont. (Adv. page 1030.)

508 CHAIRS, Camp & Folding.

*Canada Furniture Mfrs., Limited, Toronto, Ont.
*Cumming Mfg. Co., Limited, Renfrew, Ont.
*North American Bent Chair Co., Limited, The, Owen Sound, Ont. (Adv. page 1030.)
Otterville Mfg. Co., Limited, Otterville, Ont.
*Turner, J. J., & Sons, Peterboro, Ont.
*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042.)

509 CHAIRS, Cobbler-Seated & Rocking.

Ball Furniture Co., Limited, The, Hanover, Ont.
*Bell Furniture Co., Limited, The, Southampton, Ont.
*Coombe & Watson, Kincardine, Ont.
*Krug, The H., Furniture Co., Limited, Berlin, Ont.
Mundell, John C., & Co., Elora, Ont.
*North American Bent Chair Co., Limited, The, Owen Sound, Ont. (Adv. page 1030.)

510 CHAIRS, Dental.

*Bawden Machine & Tool Co., Toronto, Ont.
*Hubbard, The C. H., Co., Limited, Toronto, Ont.

511 CHAIRS, Easy, Upholstered and Rockers.

Ball Furniture Co., Limited, The, Hanover, Ont.
*Bell Furniture Co., Limited, The, Southampton, Ont.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
Castle & Son, Montreal, Que.
Cline, James A., Limited, Stratford, Ont.
*Coombe & Watson, Kincardine, Ont.
Dymond, The W. P., Co., Limited, Strathroy, Ont.
Ellis Furniture Co., The, Ingersoll, Ont.
*Elmira Upholstering Co., Limited, The, Elmira, Ont.
*Hibner, The D., Furniture Co., Limited, Berlin, Ont.
Gold Medal Furniture Co., Limited, Toronto, Ont.
*Knechtel Furniture Co., Limited, The, Hanover, Ont.
*Krug, The H., Furniture Co., Limited, Berlin, Ont.
Lippert & Co., Berlin, Ont.
McLagan, The George, Furniture Co., Limited, Stratford, Ont.
Mundell, John C., & Co., Elora, Ont.
*North American Bent Chair Co., Limited, The, Owen Sound, Ont. (Adv. page 1030.)
Snyder Bros., Upholstering Co., Limited, Waterloo, Ont.
Tombyll Upholstering & Frame Mfg. Co., Limited, The, Montreal, Que.
*Waterloo Furniture Co., Limited, The, Waterloo, Ont.

512 CHAIRS, Hammock.

*Canada Wood Specialty Co., Limited, The, Orillia, Ont.

513 CHAIRS, Household.

Ball Furniture Co., Limited, The, Hanover, Ont.
*Bell Furniture Co., Limited, The, Southampton, Ont.
Berlin Furniture Co., Limited, The, Berlin, Ont.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
*Coombe & Watson, Kincardine, Ont.
Ellis Furniture Co., The, Ingersoll, Ont.
*Hibner, The D., Furniture Co., Limited, Berlin, Ont.
*Knechtel Furniture Co., Limited, The, Hanover, Ont.
*Krug, The H., Furniture Co., Limited, Berlin, Ont.
Lippert & Co., Berlin, Ont.
McLagan, The George, Furniture Co., Limited, Stratford, Ont.
Mundell, John C., & Co., Elora, Ont.
*North American Bent Chair Co., Limited, The, Owen Sound, Ont. (Adv. page 1030.)
Stratford Chair Co., Limited, The, Stratford, Ont.
*Waterloo Furniture Co., Limited The, Waterloo, Ont.

514 CHAIRS, Invalid.

Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)

515 CHAIRS, Leather Upholstered.

*Canada Furniture Mfrs., Limited, Toronto, Ont.
*Elmira Upholstering Co., Limited, The, Elmira, Ont.
Mundell, John C., & Co., Elora, Ont.
*North American Bent Chair Co., Limited, The, Owen Sound, Ont. (Adv. page 1030.)
Office Specialty Mfg. Co., Limited, Toronto, Ont.
Snyder Bros. Upholstering Co., Limited, Waterloo, Ont.

516 CHAIRS, Morris.

*Coombe & Watson, Kincardine, Ont.
Ellis Furniture Co., The, Ingersoll, Ont.
*Hibner, The D., Furniture Co., Limited, Berlin, Ont.
*Mundell, John C., & Co., Elora, Ont.
*Waterloo Furniture Co., Limited, The, Waterloo, Ont.

517 CHAIRS, Office and Typewriter.

*Bell Furniture Co., Limited, The, Southampton, Ont.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
*Canadian Office & School Furniture Co., Limited, Preston, Ont.
*Coombe & Watson, Kincardine, Ont.
*Krug, The H., Furniture Co., Limited, Berlin, Ont.
*Library Bureau, of Canada, Limited, Ottawa, Ont. (Adv. page 848.)
Mundell, John C., & Co., Elora, Ont.
*North American Bent Chair Co., Limited, The, Owen Sound, Ont. (Adv. page 1030.)
Office Specialty Mfg. Co., Limited, Toronto, Ont.
*Snider, J. B., Waterloo, Ont.
Stratford Chair Co., Limited, The, Stratford, Ont.

518 CHAIRS, Opera.

*Canadian Office & School Furniture Co., Limited, The, Preston, Ont.
*Globe Furniture Co., Limited, The, Walkerville, Ont. (Adv. page 865.)
Vilas, W. F., Cowansville, Que.

519 CHAIRS, Reed and Rattan.

*Canada Furniture Mfrs., Limited, Toronto, Ont.
Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)
Giddings, H. & F., & Co., Granby, Que.
Imperial Rattan Co., Limited, Walkerville, Ont. (Adv. page 1034.)

520 CHAIRS, Undertakers'.

Otterville Mfg. Co., Limited, Otterville, Ont.
*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042.)

521 CHAIRS AND COUCHES, Turkish.

*Waterloo Furniture Co., Limited, The, Waterloo, Ont.

522 CHAIRS AND TABLES, Wire.

*Chadwick Bros., Hamilton, Ont.
Clatworthy & Son, Toronto, Ont.

523 CHAMPAGNES.

*Hamilton, J. S., & Co., Brantford, Ont.

524 CHANDELIERS.

*Chadwick Bros., Hamilton, Ont.
Farquhar Bros., Halifax, N.S.
*Garth Co., The, Montreal, Que.
*McAvity, T., & Sons, St. John, N.B.
Mitchell, The Robert, Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 1029.)

525 CHANNELS, Iron and Steel.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Bridge Co., Limited, The, Walkerville, Ont. (Adv. page 1044.)
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843.)
*Dominion Iron & Steel Co., Limited, Sydney, N.S.
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Hamilton Steel & Iron Co., Limited, The, Hamilton, Ont. (Adv. page 1029.)
Nova Scotia Steel & Coal Co., Limited, New Glasgow, N.S. (Adv. page 870.)
Phoenix Bridge & Iron Works, Limited, The, Montreal, Que.

526 CHAPLETS, Tin.

*Acme Can Works, Montreal, Que.
Hamilton Facing Mill Co., Limited, Hamilton, Ont.

527 CHARCOAL.

Algoma Steel Co., Limited, The, Sault Ste. Marie, Ont. (Adv. page 1059.)
Hamilton Facing Mill Co., Limited, Hamilton, Ont.
*Standard Chemical Co., of Toronto, Limited, The, Toronto, Ont. (Adv. page 1032.)
*Wood Products Co., of Canada, Limited, The, Toronto, Ont.

528 CHECKS, Baggage.

Hamilton Stamp & Stencil Works, Limited, Hamilton, Ont.
*Montreal Stencil Works, Montreal, Que. (Adv. page 1032.)
*Southam, Limited, Montreal, Que.
*Superior Mfg. Co., The, Toronto, Ont. (Adv. page 866.)
Toronto Stamp & Stencil Works, Toronto, Ont.

529 CHEESE.

Canada Condensed Milk Co., Limited, Antigonish, N.S.
*Canadian Packing Co., Limited, The, London, Ont.
*Fearman, F. W., & Co., Limited, Hamilton, Ont.
*Graham Co., Limited, The, Belleville, Ont.
*Gunns Limited, Toronto, Ont.
*MacLaren Imperial Cheese Co., Limited, Toronto, Ont.
*Matthews, The Geo., Co., Limited, Peterboro, Ont.
*Park, Blackwell Co., Limited, Toronto, Ont.
Whyte Packing Co., Limited, The, Stratford, Ont.

530 CHEESE, Potted.

City Dairy Co., Limited, Toronto, Ont.
*Ingersoll Packing Co., Limited, The, Ingersoll, Ont.
*MacLaren Imperial Cheese Co., Limited, Toronto, Ont.

531 CHEMICAL APPARATUS.

Lyman, Sons, & Co., Montreal, Que.

532 CHEMICALS.

Atteaux Dyestuff & Chemical Co., Limited, Toronto, Ont.
Canada Chemical Mfg. Co., Limited, The, London, Ont. (Adv. page 1033.)
*Chemical Laboratories, Limited, Toronto, Ont.
*Electric Reduction Co., Limited, The, Buckingham, Que.
Lyman Bros. & Co., Limited, The, Toronto, Ont. (Adv. page 1047.)
Lyman, Sons & Co., Montreal, Que.
*National Drug & Chemical Co., of Canada, Limited, Montreal, Que.

533 CHESTS, Silverware.

*Ellis, P. W., & Co., Limited, Toronto, Ont. (Adv. page 855.)

534 CHIFFONIERS.

Berlin Furniture Co., Limited, The, Berlin, Ont.
*Crown Furniture Co., Limited, The, Preston, Ont.
Hespeler Furniture Co., Limited, The, Hespeler, Ont.
Kensington Furniture Co., Limited, The, Goderich, Ont.
Listowel Furniture Co., Limited, The, Listowel, Ont.
Meaford Mfg. Co., Limited The, Meaford, Ont.
*St. Lawrence Furniture Co., The, Fraserville, Que.
*Windsor Furniture Co., Limited, Windsor, N.S.

535 CHIMNEY TOPS, Metal.

Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.

536 CHIMNEY TOPS, Salt Glazed.

Dominion Sewer Pipe Co., Limited, The, Swansea, Ont. (Adv. page 1035.
Hamilton & Toronto Sewer Pipe Co., Limited, Hamilton, Ont.
Ontario Sewer Pipe Co., Limited, Mimico, Ont.
*Standard Drain Pipe Co., of St. Johns, Que., Limited, The, St. Johns, Que. (Adv. page 854.)

537 CHIMNEYS, Lamp and Lantern.

Diamond Flint Glass Co., Limited, Montreal, Que.
*Humphreys Glass Co., Limited, Trenton, N.S.
Sydenham Glass Co., of Wallaceburg, Limited, The, Wallaceburg, Ont.

538 CHIPPERS, Pulp-Wood.

Hay, The Peter, Knife Co., Limited, Galt, Ont.
*Jenckes Machine Co., Limited, Sherbrooke, Que.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

539 CHIPS, Laundry.

*Atlantic Soap Co., Limited, Toronto, Ont.
Darling & Brady, Montreal, Que.

540 CHISELS.

*Brown-Boggs Co., Limited, The, Hamilton, Ont.
Fowler, The Josiah, Co., Limited, St. John, N.B.
*Gilmour Bros., & Co., Montreal, Que.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Warnock, The James, Co., Limited, Galt, Ont.
*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

541 CHOCOLATE.

*Cowan Co., Limited, The, Toronto, Ont.
*Lowney, The Walter M., Co., of Canada, Limited, Montreal, Que.
Mott, John P., & Co., Halifax, N.S.
Todhunter, Mitchell & Co., Toronto, Ont.
Viau & Frere, Montreal, Que.

542 CHOCOLATE, Milk.

*Cowan Co., Limited, The, Toronto, Ont.

543 CHOPPERS, Grain.
*Stratford Mill Building Co., Limited, The, Stratford, Ont.
*Vessot, S., & Co., Toronto, Ont.

544 CHOPPERS, Meat.
*Shirreff Mfg. Co., Limited, Brockville, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

545 CHUCKS, Drill.
Hamilton Tool Co., Limited, Hamilton, Ont.

546 CHUCKS, Lathe.
*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)

547 CHURNS, Barrel.
Butcher, F. E., St. Mary's, Ont.
Dowswell Mfg. Co., Limited, The, Hamilton, Ont.
*Maxwell, David, & Sons, St. Mary's, Ont.
*Richardson, C., & Co., St. Mary's, Ont. (Adv. page 1063.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
*Wortman & Ward Co., Limited, The, London, Ont.

548 CIDER, Champagne.
Christin, J., & Co., Inc., Montreal, Que.
Drake, Francis, New Glasgow, N.S.
*Robinson, O. E., & Co., Ingersoll, Ont.
Taylor & Pringle Co., Limited, Owen Sound, Ont.
1000 Islands Mineral Water Co., Ltd., Brockville, One.
Timmons, M., & Son, Quebec, Que.

549 CIGARETTES.
*Dominion Tobacco Co., Montreal, Que.
*Fortier, J. M., Limited, Montreal, Que.
Rock City Tobacco Co., Limited, The, Quebec, Que. (Adv. page 845.)
*Tuckett, The Geo. E., & Son Co., Limited, Hamilton, Ont.

550 CIGARS.
Blumenstiel, I., Hamilton, Ont.
Fair, T. J., & Co., Limited, Brantford, Ont.
Bryan, Geo. F., Co., Winnipeg, Man.
*Fortier, J. M., Limited, Montreal, Que.
Grothe, L. O., & Co., Montreal, Que.
Granda, Hermanos Y Ca., Montreal, Que.
Hirsch, J., & Sons, Limited, Montreal, Que.
*Jacobs, H., & Co., Montreal, Que.
Lewis, L., & Co., Montreal, Que.
Milligan, Geo., Toronto, Ont.
Miller & Lockwell Co., Limited, The, Quebec, Que.
Payne, J. Bruce, Limited, Granby, Que.
Rattray, J., & Co., Limited, Montreal, Que.
Rock City Tobacco Co., Limited, The, Quebec, Que. (Adv. page 845.)
*St. Lawrence Tobacco Co., Limited, The, St. Laurent, Que.
*Tuckett, The Geo. E., & Son Co., Limited, Hamilton, Ont.
Webster, W. R., & Co., Sherbrooke, Que.

551 CLAMPS, Guy and Pipe.
*Pringle, The R. E. T., Co., Limited, Montreal, Que.

552 CLAMPS, Quilting Frame, Cabinet, Carpenters'.
Taylor-Forbes Co., Limited, Guelph, Ont.

553 CLAPBOARDS.
*Brunette Saw Mill Co., Limited, New Westminster, B.C.
*Charlemagne & Lac Ouareau Lumber Co., The, Montreal, Que.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.

554 CLASPS, Corset.
Dominion Corset Co., Quebec, Que.
*Parisian Corset Mfg. Co., Limited, Quebec, Que.
St. Lawrence Steel & Wire Co., Ltd., Gananoque, Ont.

555 CLAY, China or Pearl Hardening.
Toronto Liquid Carbonate Co., Limited, Toronto, Ont.

556 CLAY PRODUCTS, Fire.
Hamilton Facing Mill Co., Limited, Hamilton, Ont.
Montreal Fire Brick Works, The, Montreal, Que.

557 CLEANERS, Drain.
*Jones, D. F., Mfg. Co., Limited, Gananoque, Ont.

558 CLIPPERS, Bolt.
Jardine, A. B., & Co., Hespeler, Ont.

559 CLOAKS, SUITS AND COSTUMES, Ladies'.
Boas-Felsen Co., The, Montreal, Que.
Britannia Mfg. Co., Limited, Halifax, N.S.
Canada Cloak Co., Toronto, Ont.
Consolidated Cloak Co., Ltd., The, Toronto, Ont.
Continental Costume Co., Ltd., The, Toronto, Ont.
Crescent Mfg. Co., Limited, Montreal Que.
Dupuis Freres, Limited, Montreal, Que.
Eaton, The T., Co., Limited, Toronto, Ont.
*Empire Mfg. Co., Limited, The, Montreal, Que.
Harris & Co., Limited, Rockwood, Ont. (Adv. page 851.)
*Hart Manufacturing Co., The, Montreal, Que.
*Knittofit Mfg. Co., The, Montreal, Que.
McKinnon, S. F., & Co., Limited, Toronto, Ont.
Northway, John & Son, Limited, Toronto, Ont.
Novi-Modi Costume Co., Limited, Toronto, Ont.
*Rea, A. E., & Co., Limited, Toronto, Ont.
Ross, The C., Co., Limited, Ottawa, Ont.
Simpson, The Robert, Co., Limited, Toronto, Ont.
*Stewart, Howe & Meek Co., Limited, Toronto, Ont.
Sommer, A., & Co., Montreal, Que.
Victor Mfg. Co., The, Quebec, Que.
Waldman, J. H., & Co., Montreal, Que.

560 CLOCKS, Grandfather.
Berlin Furniture Co., Limited, The, Berlin, Ont.

561 CLOSETS, Range, Enameled, Cast Iron.
*Standard Ideal Co., Limited, The, Port Hope, Ont.

562 CLOSETS, Sanitary.
Mitchell, The Robt., Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
*Standard Ideal Co., Limited, The, Port Hope, Ont. (Adv. pages 873-874.)

563 CLOTH, Beaver.
*Auburn Woollen Co., Limited, Peterboro, Ont.
Harris & Co., Limited, Rockwood, Ont. (Adv. page 851.)
*Montreal Woollen Mill Co., The, Montreal, Que.
Paton Mfg. Co., Sherbrooke, Que. (Adv. page 850.)
*Rosamond Woollen Co., Almonte, Ont.

564 CLOTH, Carriage.
*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Montreal Woollen Mill Co., The, Montreal, Que.

565 CLOTH, Cheese.
*Dominion Textile Co., Limited, Montreal, Que.

566 CLOTH, Cheviot.
Harris & Co., Limited, Rockwood, Ont. (Adv. page 851.)
*Montreal Woollen Mill Co., The, Montreal, Que.
Paton Mfg. Co., Sherbrooke, Que. (Adv. page 850.)
Pattinson, Geo., & Co., Preston, Ont.
*Rosamond Woollen Co., Almonte, Ont.

567 CLOTH, Costume.
Dick, John, Limited, Toronto, Ont.
Forbes, R., Co., Limited, Hespeler, Ont.
Harris & Co., Limited, Rockwood, Ont. (Adv. page 851.)
*Hewson Woollen Mills, Limited, Amherst, N.S.
Magog Woollen Mills, Limited, Sherbrooke, Que.
*Oxford Mfg. Co., Limited, Oxford, N.S.
Paton Mfg. Co., Limited, Sherbrooke, Que. (Adv. page 850.)
Pattinson, Geo., & Co., Preston, Ont.
Slingsby Mfg. Co., Limited, The, Brantford, Ont.
Willett, S. T., Chambly Canton, Que.

568 CLOTH, Frieze.
Dick, John, Limited, Toronto, Ont.
Forbes, R., Co., Limited, Hespeler, Ont.
Harris & Co., Limited, Rockwood, Ont. (Adv. page 851.)
*Hewson Woollen Mills, Limited, Amherst, N.S.
Magog Woollen Mills, Limited, Sherbrooke, Que.
*Montreal Woollen Mill Co., The, Montreal, Que.
Paton Mfg. Co., Sherbrooke, Que. (Adv. page 850.)
Pattinson, Geo., & Co., Preston, Ont.
*Rosamond Woollen Co., Almonte, Ont.
Taylor, The T. H., Co., Limited, Chatham, Ont.
Willett, S. T., Chambly Canton, Que.

569 CLOTH, Homespuns.
Dick, John, Limited, Toronto, Ont.
Harris & Co., Limited, Rockwood, Ont. (Adv. page 851.)
*Hewson Woollen Mills, Limited, Amherst, N.S.
Magog Woollen Mills, Limited, Sherbrooke, Que.
*Oxford Mfg. Co., Limited, Oxford, N.S.
Paton Mfg. Co., Sherbrooke, Que. (Adv. page 850.)
Taylor, The T. H., Co., Limited, Chatham, Ont.
Wylie, James H., Limited, Almonte, Ont.

570 CLOTH, Kersey.
Dontigny, Philip, Arnprior, Ont.
Glen Woollen Mills, Limited, Glen Williams, Ont.
Maclaren, Alexander, Wakefield, Que.
*Montreal Woollen Mill Co., The, Montreal, Que.
Paton Mfg. Co., Sherbrooke, Que. (Adv. page 850.)
Slingsby Mfg. Co., Limited, The, Brantford, Ont.
Wylie, James H., Limited, Almonte, Ont.

571 CLOTH, Mackinaw.
Bird Woollen Mill Co., Limited, The, Bracebridge, Ont.
Brown & Wigle Co., of Kingsville, Limited, Kingsville, Ont.
Glen Woollen Mills, Limited, Glen Williams, Ont.
Horn Bros. Woollen Co., Limited, Lindsay, Ont.
*Montreal Woollen Mill Co., The, Montreal, Que.
Slingsby Mfg. Co., Limited, The, Brantford, Ont.
Taylor, The T. H., Co., Limited, Chatham, Ont.

572 CLOTH, Melton Overcoating.
*Auburn Woollen Co., Limited, Peterboro, Ont.
*Montreal Woollen Mill Co., The, Montreal, Que.
Paton Mfg. Co., Sherbrooke, Que. (Adv. page 850.)
Pattinson, Geo., & Co., Preston, Ont.
*Rosamond Woollen Co., Almonte, Ont.
Willett, S. T., Chambly Canton, Que.

573 CLOTH, Serge.
Forbes, R., Co., Limited, Hespeler, Ont.
Paris Wincey Mills Co., The, Paris, Ont. (Adv. page 854.)
Paton Mfg. Co., Sherbrooke, Que. (Adv. page 850.)
Pattinson, Geo., & Co., Preston, Ont.
*Rosamond Woollen Co., Almonte, Ont.
Willett, S. T., Chambly Canton, Que.

574 CLOTH, Tweed.
*Auburn Woollen Co., Limited, Peterboro, Ont.
Bird Woollen Mill Co., Ltd., The, Bracebridge, Ont.
Brook Woollen Co., of Simcoe, Limited, The, Simcoe, Ont.
Dick, John, Limited, Toronto, Ont.
Dontigny, Philip, Arnprior, Ont.
Duftons, Limited, Stratford, Ont.
Forbes, R., Co., Limited, Hespeler, Ont.
Grant, James, Chesley, Ont.
Harris & Co., Limited, Rockwood, Ont. (Adv. page 851.)
*Hewson Woollen Mills, Limited, Amherst, N.S.
Maclaren, Alexander, Wakefield, Que.
Magog Woollen Mills, Limited, Sherbrooke, Que.
*Montreal Woollen Mill Co., The, Montreal, Que.
*Oxford Mfg. Co., Limited, Oxford, N.S.
Paris Wincey Mills Co., The, Paris, Ont. (Adv. page 854.)
Paton Mfg. Co., Sherbrooke, Que. (Adv. page 850.)
Pattinson, Geo., & Co., Preston, Ont.
Penmans, Limited, Paris, Ont. (Adv. page 1063.)
*Rosamond Woollen Co., Almonte, Ont.
Slingsby Mfg. Co., Limited, The, Brantford, Ont.
Willett, S. T., Chambly Canton, Que.

575 CLOTH, Venetian.
*Auburn Woollen Co., Limited, Peterboro, Ont.
Harris & Co., Limited, Rockwood, Ont. (Adv. page 851.)
Willett, S. T., Chambly Canton, Que.

576 CLOTH, Window Shade.
Daly & Morin, Montreal, Que.
*Smith, Carter & Smith, Limited, Montreal, Que.

577 CLOTH, Wire.
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
Johnson, C. H., & Sons, Limited, Montreal, Que.
Major Mfg. Co., Limited, The, Montreal, Que.
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Ltd., Toronto, Ont. (Adv. page 1009.)

578 CLOTH, Worsted.
Dick, John, Limited, Toronto, Ont.
Forbes, R., Co., Limited, Hespeler, Ont.
Harris & Co., Limited, Rockwood, Ont. (Adv. page 851.)
*Hewson Woollen Mills, Limited, Amherst, N.S.
*Montreal Woollen Mill Co., The, Montreal, Que.
Paton Mfg. Co., Sherbrooke, Que. (Adv. page 850.)
*Rosamond Woollen Co., Almonte, Ont.

579 CLOTHES HORSES OR BARS.
Otterville Mfg. Co., Limited, Otterville, Ont.

580 CLOTHING, Athletic.
*Wilson, The Harold A., Co., Limited, Toronto, Ont.

581 CLOTHING, Automobile.
Gilchrist Clothing, Limited, The, Toronto, Ont.
*National Rubber Co., of Canada, Montreal, Que.

582 CLOTHING, Card.
*Bredannaz Louis, & Sons, Toronto, Ont.
*McLaren, D. K., Limited, Montreal, Que. (Adv. page 1020.)
*McLaren, The J. C., Belting Co., Montreal, Que.

583 CLOTHING, Duck and Leather.
*Hudson Bay Knitting Co., The, Montreal, Que.
*Woods, Limited, Ottawa, Ont.

584 CLOTHING, Horse.
See Blankets, Horse.

585 CLOTHING, Ladies'.
See Cloaks, Suits and Costumes, Blouses and Shirt Waists, Skirts, Dress.

586 CLOTHING, Mackinaw.
Carss Mackinaw Clothing Co., Orillia, Ont.
*Hudson Bay Knitting Co., The, Montreal, Que.
*Turner, Beeton & Co., Limited, Victoria, B.C.

587 CLOTHING, Men's and Boys'.
Black, John P., & Co., Limited, Montreal, Que.
Blue, Walter & Co., Limited, Sherbrooke, Que.
Bond, H. E., & Co., Limited, Toronto, Ont.
Braime, T. E., & Co., Toronto, Ont.
Chalcraft, W. E., & Co., Limited, Toronto, Ont.
Clayton & Sons, Halifax, N.S.
Coppley, Noyes & Randall, Limited, Hamilton, Ont.
Crown Tailoring Co., Limited, The, Toronto, Ont.
Dupuis Freres, Limited, Montreal, Que.
Eaton, The T., Co., Limited, Toronto, Ont.
Fashion-Craft Mfrs., Limited, Montreal, Que.
Friedman Bros., Montreal, Que.
Gilchrist Clothing, Limited, The, Toronto, Ont.
*Grafton & Co., Limited, Dundas, Ont.
Greene, Swift & Co., London, Ont.
Hachborn, E. G., & Co., Toronto, Ont.
Hobberlin, The House of, Toronto, Ont.
Jackson Manufacturing Co., The, Clinton, Ont.
Johnston, W. R., & Co., Limited, Toronto, Ont.
Lailey, W. H., & Co., Limited, Toronto, Ont.
London Pant, Overall & Shirt Mfg. Co., Limited, London, Ont.
Lowndes Co., Limited, The, Toronto, Ont.
Northway, John & Son, Limited, Toronto, Ont.
*Peck, John W., & Co., Limited, Montreal, Que. (Adv. page 837.)
Quebec Clothing Mfg. Co., Quebec, Que.
Sanford, W. E., Mfg. Co., Limited, Hamilton, Ont.
Simpson The Robert, Co., Limited, Toronto, Ont.
*Stilenfit Clothing Co., The, Montreal, Que.
Thornton & Douglas, Ltd., Hamilton, Ont.
Vineberg, H., & Co., Montreal, Que.
Wener Bros., & Hart, Montreal, Que.
Wilkins, Robert C., Montreal, Que.

588 CLOTHING, Oiled.
Guelph Oiled Clothing Co., Limited, The, Guelph, Ont.
Matte, T., Quebec, Que.
*Tower Canadian Oiled Clothing Co., Limited, Toronto, Ont.

589 CLOTHING, Railway Employees', Steamboat Employees', etc.
*Broderick, Frank, & Co., Toronto, Ont.
Crown Tailoring Co., Limited, The, Toronto, Ont.
Gilchrist Clothing, Limited, The, Toronto, Ont.

590 CLOTHING, Rainproof and Waterproof.
Beaver Rubber Clothing Co., Limited, The, Montreal, Que.
Crown Tailoring Co., Limited, The, Toronto, Ont.
Guelph Oiled Clothing Co., Limited, The, Guelph, Ont.
London Pant, Overall & Shirt Mfg. Co., Limited, London, Ont.
Matte, T., Quebec, Que.
Montreal Waterproof Clothing Co., Montreal, Que.
*National Rubber Co. of Canada, Montreal, Que.

591 CLOTHING, Rubber.
*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
*National Rubber Co., of Canada, Montreal, Que.

592 CLUTCHES, Coupling.
*Chapman Double Ball Bearing Co., Limited, Toronto, Ont.
*Dodge Manufacturing Co., of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)

593 COAL.
*Cumberland Railway & Coal Co., Montreal, Que.
*Nova Scotia Steel & Coal Co., Limited, New Glasgow, N.S. (Adv. page 870.)
Standard Fuel Co., of Toronto, Limited, The, Toronto, Ont.

594 COAL, Artificial.
Campbell's Sons, R., Hamilton, Ont.

595 COAL TAR PRODUCTS.
*Carritte, deB., St. John, N.B.
*Dominion Tar & Chemical Co., Limited, The, Sydney, N.S.

596 COATS, Astrachan and Saskatchewan.
*Newlands & Co., Galt, Ont.

597 COATS, Coon.
*Lalibere, J. B., Quebec, Que.
Winnipeg Fur Co., The, Winnipeg, Man.

598 COATS, Fur.
Bourdeau, J., & Son, Montreal, Que.
Dechene & Paulin, Quebec, Que.
*Fairweather, J. W. T., & Co., Toronto, Ont.
*Laliberte, J. B., Quebec, Que.
Swift, Copland & Co., Limited, Montreal, Que.
Waldron, Drouin Co., Limited, The, Montreal, Que.
Winnipeg Fur Co., The, Winnipeg, Man.

599 COATS, Leather.
*Clarke, A. R., & Co., Limited, Toronto, Ont.
*Hudson Bay Knitting Co., The, Montreal, Que.
London Pant, Overall & Shirt Mfg. Co., Limited, London, Ont.

600 COATS, Rain (Ladies').
*National Rubber Co., of Canada, Montreal, Que.
Waldman, J. H., & Co., Montreal, Que.

601 COATS, Rubber (Firemen's, etc.).
*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)

602 COATS AND VESTS, Knitted.
Monarch Knitting Co., Limited, The, Dunnville, Ont.

603 COBBLERS' SETS.
Taylor-Forbes Co., Limited, Guelph, Ont.

604 COCKS, Brass.
*Babcock & Wilcox, Limited, Montreal. (Adv. page 851.)
*Canadian Brass Mfg. Co., Limited, The, Galt, Ont.
*Cuthbert, W. R., & Co., Montreal, Que.
*Garth Co., The, Montreal, Que.
*Kerr Engine Co., Limited, The, Walkerville, Ont. (Adv. page 1033.)
Mitchell, The Robt., Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Penberthy Injector Co., Limited, Windsor, Ont. (Adv. page 865.)
Standard Brass Mfg. Co., Limited, Sarnia, Ont.

605 COCKS, Steam, Gas and Water.
See Brass Goods, Plumbers' and Steamfitters'.

606 COCOA.
*Cowan Co., Limited, The, Torotnto, Ont.
*Lowney, The Walter M., Co., of Canada, Ltd., Montreal, Que.
Mott, John P., & Co., Halifax, N.S.
Todhunter, Mitchell & Co., Toronto, Ont.

607 COCOA, Condensed.
*Truro Condensed Milk Co., Limited, Truro, N.S.

***608 COCOANUT, Prepared.**
*Greig, The Robert, Co., Limited, Toronto, Ont.

609 COFFEE.
Barbour, G. E., Co., Limited, St. John, N.B.
Blue Ribbon, Limited, Winnipeg, Man.
Codville Co., Limited, The, Winnipeg, Man.
*Dalley, The F. F., Co., of Hamilton, Limited, Hamilton, Ont.
Dalton Bros., Toronto.
Dyson Co., The, Winnipeg, Man.
Ewing, S. H., & Sons, Montreal, Que.
*Gorman, Eckert & Co., Limited, London, Ont.
*Greig, The Robert, Co., Limited, Toronto, Ont.
McLarens, Limited, Hamilton, Ont.
*Pure Gold Mfg. Co., Limited, Toronto, Ont.
Schwartz, W. H., & Sons, Halifax, N.S.
Todhunter, Mitchell & Co, Toronto, Ont.
White Star Mfg. Co., The, Winnipeg, Man.

610 COFFEE, Condensed
*Charlottetown Condensed Milk Co., Ltd., Charlottetown, P.E.I.
*Truro Condensed Milk Co., Limited, Truro, N.S.

611 COFFINS.
See Caskets and Coffins.

612 COILS, Copper, Steam.
*Coulter, Wm., & Sons, Toronto, Ont.
Mitchell, The Robt. Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

613 COILS, Spark.
Canadian General Electric Co., Ltd., Toronto, Ont.

614 COKE.
Standard Fuel Co., of Toronto, Limited, The, Toronto, Ont.

615 COLLAR CHECKS.
Brook Woollen Co., of Simcoe, Limited, The, Simcoe, Ont.
Glen Woollen Mills, Limited, Glen Williams, Ont.

616 COLLARS AND CUFFS, Celluloid, Rubberine, etc.
Arlington Co., of Canada, Limited, Toronto, Ont.
Miller Bros., Co., Limited, The, Montreal, Que.

617 COLLARS AND CUFFS, Linen.
*Allen Mfg. Co., Limited, Toronto, Ont.
Arlington Co., of Canada, Limited, Toronto, Ont.
Crescent Mfg. Co., Limited, Montreal, Que.
Ross, The C., Co., Limited, Ottawa, Ont.
*Standard Shirt Mfg. Co., Limited, The, Montreal, Que.
Van Allen Co., Limited, Hamilton, Ont.
Williams, Greene & Rome Co., of Berlin, Ltd., The, Berlin, Ont.

618 COLLARS, Clamp and Shaft.
*Dodge Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
Fleck, Alexander, Limited, Ottawa, Ont.
Fleming, James, St. John, N.B.
Letson & Burpee, Limited, Vancouver, B.C.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Wilson, J. C., & Company, Glenora, Ont.

619 COLLARS, Dog.
*Edwards, J. E., & Sons, Bracondale, Ont.
*General Leather Goods, Limited, Toronto, Ont.
Kelly's, Limited, Halifax, N.S.

620 COLLARS, Horse.
*Ackerman, B. F., Son & Co., Peterboro, Ont.
Adams Bros. Harness Mfg. Co., Limited, Toronto, Ont.
*Beal Bros., Toronto, Ont. (Adv. page 868.)
*Great West Saddlery Co., Limited, The, Winnipeg, Man.
*Heney, E. N., Co., Limited, Montreal, Que.
Jolley, James, & Sons, Limited, Hamilton, Ont.
*Lamontagne, Limited, Montreal, Que.

621 COLLARS, Paper.
Miller Bros. Co., Limited, The, Montreal, Que.

622 COLORS, Coach and Railway.
Berry Bros., Limited, Walkerville, Ont.
*Brandram-Henderson, Limited, Montreal, Que. (Adv. page 840.)
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
Jamieson, R. C., & Co., Limited, Montreal, Que.
Langmuir, James, & Co., Limited, Toronto, Ont.
McArthur, Corneille & Co., Montreal, Que.
Muirhead, A., Toronto, Ont.
*Pendray, W. J., Victoria, B.C.
*Ramsay, A., & Son Co., Montreal, Que.
Sherwin-Williams Co., The, Montreal, Que.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
*Staneland Co., Limited, The, Victoria, B.C.

623 **COLORS, Confectioners' & Bottlers'.**
*Downey, W. P., Montreal, Que.
Hutchinson & Peterson, Toronto, Ont.
Patrick, W. G., & Co., Toronto, Ont.
*Seely Mfg. Co., Windsor, Ont.

624 **COLORS, Dry.**
*Brandram-Henderson, Ltd., Montreal, Que. (Adv. page 840.)
*Canada Paint Co., Ltd., The, Montreal, Que. (Adv. page 1027.)
*Imperial Varnish & Color Co., Ltd., The, Toronto, Ont. (Adv. page 845.)
*Pendray, W. J., Victoria, B.C.
*Ramsay, A., & Son Co., Montreal, Que.
Sherwin-Williams Co., The, Montreal, Que.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
*Staneland Co., Limited, The, Victoria, B.C.

625 **COLORS IN JAPAN.**
*Brandram-Henderson, Ltd., Montreal, Que. (Adv. page 840.)
*Imperial Varnish & Color Co., Ltd., The, Toronto, Ont. (Adv. page 845.)
Langmuir, James, & Co., Limited, Toronto, Ont.
*Martin Senour Co., Limited, The, Montreal, Que.
*Moore, Benjamin, & Co., Limited, West Toronto, Ont.
Muirhead, A., Toronto, Ont.
*Pendray, W. J., Victoria, B.C.
*Ramsay, A., & Son Co., Montreal, Que.
Robertson, The James, Co., Limited, Montreal, Que.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
*Staneland Co., Limited, The, Victoria, B.C.
Stephens, G. F., & Co., Limited, Winnipeg, Man.

627 **COLORS IN OIL.**
*Brandram-Henderson, Limited, Montreal, Que. (Adv. page 840.)
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
Langmuir, James, & Co., Limited, Toronto, Ont.
*Martin Senour Co., Limited, The, Montreal, Que.
*Moore, Benjamin, & Co., Limited, West Toronto, Ont.
Muirhead, A., Toronto, Ont.
*Ramsay, A., & Son Co., Montreal, Que.
Robertson, The James, Co., Limited, The, Montreal, Que.
Sherwin-Williams Co., The, Montreal, Que.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
*Staneland Co., Limited, The, Victoria, B.C.
Stephens, G. F., & Co., Limited, Winnipeg, Man.

629 **COLORS IN WATER.**
*Staneland Co., Limited, The, Victoria, B.C.
Stephens, G. F., & Co., Limited, Winnipeg, Man.

630 **COLORS, Mortar.**
See Stains, Mortar.

631 **COLUMNS, Brass.**
Toronto Brass Mfg. Co., Toronto, Ont.

632 **COLUMNS AND PILASTERS, Building.**
Epps, Dodds & Co., St. George, N.B.
*Milne, Coutts & Co., Limited, St. George, N.B.
*Stanstead Granite Quarries Co., Limited, Bebee Plain, Que.
*Tayte-Meating & Co., St. George, N.B.

633 **COLUMNS, Iron (Building).**
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Fleming, James, St. John, N.B.
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Watson, John & Son, Montreal, Que.

634 **COMBS, Curry.**
Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
*Eclipse Mfg. Co., Limited, The, Ottawa, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
*Wright, E. T., & Co., Hamilton, Ont.

635 **COMBS, Toilet.**
Arlington Co., of Canada, Limited, Toronto, Ont.

636 **COMFORTERS.**
Alaska Feather & Down Co., Ltd., Montreal, Que. (Adv. page 860.)
*Canadian Feather & Mattress Co., Limited, The, Toronto, Ont.

637 **COMMUTATORS.**
Canadian General Electric Co., Ltd., Toronto, Ont.
Consolidated Electric Co., Limited, Toronto, Ont.

638 **COMPASSES.**
Piper, The Hiram L., Co., Limited, Montreal, Que.
*Piper, The N. L., Railway Supply Co., Limited, Toronto, Ont.

639 **COMPOSING MACHINES.**
See Machines, Composing.

640 **COMPOSITION, Roller and Padding.**
*Canada Printing Ink Co., Limited, Toronto, Ont.

641 **COMPOUNDS, Boiler.**
*British-American Oil Co., Ltd., The, Toronto, Ont.
Canada Chemical Mfg. Co., Limited, The, London, Ont. (Adv. page 1033.)
Crescent Oil Co., The, Hamilton, Ont.
*Crown Oil Refining Co., Limited, Hamilton, Ont.
Electric Boiler Compound Co., Limited, The, Guelph, Ont.
*Holden, N. J., Co., Limited, Montreal, Que.
*McColl Bros., & Co., Toronto, Ont.
Seward, The L. B., Lubricating Co., Ottawa, Ont.
*Spooner, Alonzo W., Port Hope, Ont.

642 **COMPOUNDS, Insulating.**
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
*International Varnish Co., Limited, Toronto, Ont. (Adv. page 859.)
*Standard Paint Co., of Canada, Limited, The, Montreal, Que.

643 **COMPRESSORS, Air and Steam.**
Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Canadian Rand Co., Limited, Montreal, Que.
Canadian Westinghouse Co., Limited, Hamilton, Ont.
Darling Bros., Limited, Montreal, Que.
*Holden, N. J., Co., Limited, Montreal, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

644 **COMPRESSORS, Air, Electric Motor-Driven.**
Canadian Westinghouse Co., Limited, Hamilton, Ont.

645 **CONCORDS (Vehicles).**
See Carriages.

646 **CONDENSERS.**
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Inglis, The John Co., Limited, Toronto, Ont.
Kerr, J. & J., Co., Limited, Petrolia, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

647 **CONDENSERS, Ammonia.**
*Garth Co., The, Montreal, Que.

648 **CONDUITS, Electric Wire.**
Bongard, C. W., Co., Limited, Toronto, Ont.
Canadian General Electric Co., Limited, Toronto, Ont.
*Conduits Co., Limited, Toronto, Ont. (Adv. page 1020.)

649 **CONES, Bicycle and Roller Skate.**
Morrow, The John, Screw, Limited, Ingersoll, Ont.

650 **CONFECTIONERS' SUPPLIES.**
Cowan, John Co., Limited, Montreal, Que.

651 **CONFECTIONERY.**
Abbot, Grant & Co., Limited, Brockville, Ont.
Bean & Westlake, Woodstock, Ont.
Boyd, The W. J., Candy Co., Winnipeg, Man.
Bradshaw, I. D., & Co., Toronto, Ont.
Coles, George, Limited, The, Toronto, Ont.
Cowan Co. Limited, The, Toronto, Ont.
Crothers, The W. J., Co., Limited, Kingston, Ont.
Crown Mfg. Co., Limited, The, Toronto, Ont.
Doerr, C. H., & Co., Berlin, Ont.
Foley, Lock & Larson, Winnipeg, Man.
*Ganong Bros., Limited, St. Stephen, N.B.
*Hamilton, G. J., & Sons, Pictou, N.S.
Lang Mfg. Co., The, Montreal, Que.
*Lowney, The Walter M., Co., of Canada, Limited, Montreal, Que.
Lynch Bros., Dolan Co., Limited, Sydney, N.S.
McConkey, Geo. S., Toronto, Ont.
*McCormick Mfg. Co., Limited, The, London, Ont.
McGregor-Harris Co., Limited, Toronto, Ont.
McLauchlan & Sons, Co., Limited, Owen Sound, Ont.
McWilliam, W., & Son, Quebec, Que.
Martineau, L., & Cie, Limited, Montreal, Que.
*Moirs, Limited, Halifax, N.S.
Montreal Biscuit Co., The, Montreal, Que.
*Mooney Biscuit & Candy Co., Limited, The, Stratford, Ont.
Nasmith Co., Limited, The, Toronto, Ont.
Paulin Chambers Co., Limited, The, Winnipeg, Man.
*Perrin, D. S., & Co., Limited, London, Ont.
Quaker Candy Co., Toronto, Ont.
Robertson Bros., Limited, Toronto, Ont.
*Smith, M. R., & Co., Limited, Victoria, B.C.
Stewart Co., Limited, The, Toronto, Ont.
Telfer Bros., Limited, Collingwood, Ont.
Viau & Frere, Montreal, Que.
Webb, The Harry, Co., Limited, Toronto, Ont.
White Candy Co., Limited, The, St. John, N.B.

652 **CONTROLLERS, Electric.**
Canadian General Electric Co., Limited, Toronto, Ont.
Canadian Westinghouse Co., Limited, Hamilton, Ont.
*Parkin Elevator Co., Limited, The, Hespeler, Ont.
Turnbull Elevator Mfg. Co., The, Toronto, Ont.

653 **CONVEYORS, Chain and Belt.**
*Dodge Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863.)

654 **CONVEYORS, Coal and Ash.**
*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.

655 **CONVEYORS, Sawdust.**
Madison Williams Mfg. Co., Limited, The, Lindsay, Ont.

656 **CONVEYORS, Spiral.**
*Dodge Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
*Jenckes Machine Co., Limited, The, Sherbrooke Que.

657 **COOKING APPARATUS, Electric.**
Canadian General Electric Co., Limited, Toronto, Ont.

658 **COOLERS, Beer and Cream.**
Booth Copper Co., Limited, The, Toronto, Ont.

659 **COOLERS, Water.**
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., London, Ont. (Adv. page 1022.)
Prowse, Geo. R., Montreal, Que.

660 **COOPERAGE STOCK.**
Butcher, F. E., St. Mary's, Ont.
Campbell, David, & Son, Montreal, Que.
London & Petrolia Barrel Co., The, London, Ont.
*Murray & Gregory, Limited, St. John, N.B.
Starke Cooperage Co., The, Montreal, Que.
*Sutherland, Innes Co., Limited, The, Chatham, Ont. (Adv. page 856.)

661 **COPING, Metal.**
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.

662 **COPING, Wall.**
Dominion Sewer Pipe Co., Limited, The, Swansea, Ont. (Adv. page 1035.)
Hamilton & Toronto Sewer Pipe Co., Limited, The, Hamilton, Ont.

663 **COPPER, Matte.**
*Consolidated Mining & Smelting Co., of Canada, Limited, Trail, B.C. (Adv. page 1026.)
Granby Consolidated Mining, Smelting & Power Co., Limited, Grand Forks, B.C.
*Hall Mining & Smelting Co., Limited, Nelson, B.C.

664 COPPER, Nickel Matte.

Canadian Copper Co., The, Copper Cliff, Ont.

665 COPPER, Pig.

*Frankel Bros., Toronto, Ont.
Syracuse Smelting Works, Montreal, Que.

666 COPPER, Sheet.

*Canada Brass Rolling Mills, Limited, Toronto, Ont.
*Garth Co., The, Montreal, Que.
Mitchell, The Robt., Co., Limited, Montreal, Que.

667 COPPER, Sulphate.

*Consolidated Mining & Smelting Co., of Canada, Limited, Trail, B.C. (Adv. page 1026.)

668 COPPER WORK, for Bakers, Confectioners, Brewers, Distillers, Vinegar Manufacturers, Sugar Refineries, etc.

Booth Copper Co., Limited, The, Toronto, Ont.
Gardner, Robert, & Son, Montreal, Que. (Adv. page 1043.)
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Sydney Foundry & Machine Works, Limited, The, Sydney, N.S.

669 COPPERAS.

Canada Chemical Mfg. Co., Limited, The, London, Ont. (Adv. page 1033.)
Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
Nichols Chemical Co., of Canada, Limited, The, Montreal, Que. (Adv. page 1045.)

670 COPPERWARE.

*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Farquhar Bros., Halifax, N.S.
Hughes, J. W., & Son, Montreal, Que.
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., London, Ont. (Adv. page 1022.)
Prowse, Geo. R., Montreal, Que.

671 CORD, Awning, Bell, Loom, Sash, Seaming, etc.

Doon Twine & Cordage Co., Limited, The, Doon Ont.
Hamilton Cotton Co., Hamilton, Ont. (Adv. page 870.)

672 CORD, Rubber.

*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

673 CORD, Sewing, Stitching, Broom and Whisk.

Doon Twin & Cordage Co., Limited, The, Doon, Ont.

674 CORD, Wire (Electric Flexible).

Canadian General Electric Co., Limited, Toronto, Ont.
*Phillips, Eugene F., Electrical Works, Limited, Montreal, Que.

675 CORDAGE, Cotton, Hemp and Jute.

*Brantford Cordage Co., Limited, The, Brantford, Ont.
*Consumers Cordage Co., Limited, Montreal, Que.
Doon Twine & Cordage Co., Limited, The, Doon, Ont.
Plymouth Cordage Co., Welland, Ont.
Shurly & Derrett, Toronto, Ont. (Adv. page 845.)

676 CORDAGE, Linen and Flax.

*Brantford Cordage Co., Limited, The Brantford, Ont.
Doon Twine & Cordage Co., Limited, The, Doon, Ont.
Shurly & Derrett, Toronto, Ont. (Adv. page 845.)

677 CORDAGE, Manilla and Sisal.

*Brantford Cordage Co., Limited, The, Brantford, Ont.
*Consumers Cordage Co., Limited, Montreal, Que.
Plymouth Cordage Co., Welland, Ont.

678 CORDS, Tassels & Fringes.

Dominion Cord & Tassel Co., The, Montreal, Que.
*Dominion Regalia Co., Limited, The, Toronto, Ont.
Moulton & Co., Montreal, Que.
*Peters, J. Henry, Co., Toronto, Ont.
Textile Trimmings Co., The, Toronto, Ont.
White-Allan Co., of Toronto, Limited, The, Toronto, Ont.

679 CORKS AND CROWN CORKS.

Aluminum & Crown Stopper Co., Toronto, Ont.
*Dominion Crown Cork Co., Limited, Toronto, Ont.
Ewing, S. H., & Sons, Montreal, Que.
Freyseng Cork Co., Limited, Toronto, Ont.

680 CORKS OR STOPPERS, Rubber.

*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)

681 CORNICES, Galvanized Iron.

Galt Art Metal Co., Limited, The, Galt, Ont. (Adv. page 1034.)
Irwin, Thos., & Son, Hamilton, Ont.
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994 and 995.)
*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)
*Riddell, John E., Hamilton, Ont.
Stevely, Wm., & Son, London, Ont.
Winnipeg Ceiling & Roofing Co., Winnipeg, Man.
Wheeler & Bain, Toronto, Ont.

682 CORSETS.

Brush & Co., Toronto, Ont.
Crompton Corset Co., Limited, Toronto, Ont.
Dominion Corset Co., Quebec, Que.
*Parisian Corset Mfg. Co., Limited, Quebec, Que.

683 CORUNDUM.

*Prescott Emery Wheel Co., Limited, Prescott, Ont.

684 COSTUME CLOTH.

See Cloth, Costume.

685 COSTUMES, Ladies'.

See Cloaks, Suits and Costumes, Ladies'.

686 COTS.

*Canada Furniture Mfrs., Limited, Toronto, Ont.
*Gale, Geo., & Sons, Waterville, Que.
Ham & Nott Co., Limited, Brantford, Ont.
Ives, H. R., Co., Limited, The, Montreal, Que.
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)
*Munro Wire Works, Limited, New Glasgow, N.S.
Otterville Mfg. Co., Limited, Otterville, Ont.
*Toronto Bedding Co., Limited, The, Toronto, Ont.

687 COTTOLENE.

*Fairbank, The N. K., Co., Montreal, Que.

688 COTTONADES.

*Canadian Colored Cotton Mills Co., Limited, The, Montreal, Que. (Adv. page 846.)
Cornwall & York Cotton Mills Co., Limited, St. John, N.B.
Hamilton Cotton Co., Hamilton, Ont. (Adv. page 870.)
*Morrice, The D., Co., Limited, Montreal, Que.

689 COTTONS, Printed, Plain and Fancy.

*Canadian Colored Cotton Mills Co., Limited, The, Montreal, Que. (Adv. page 846.)
Cornwall & York Cotton Mills Co., Limited, St. John, N.B.
*Dominion Textile Co., Limited, Montreal, Que.
Montreal Cotton Co., Valleyfield, Que.
*Morrice, The D., Co., Limited, Montreal, Que.
Mount Royal Spinning Co., Limited, The, Montreal, Que.

690 COTTON WASTE.

See Waste, Cotton.

691 COUCHES.

Cline, Jas. A., Limited, Stratford, Ont.
*Coombe & Watson, Kincardine, Ont.
Dymond, The W. P., Co., Limited, Strathroy, Ont.
Ellis Furniture Co., The, Ingersoll, Ont.
*Hibner, The D., Furniture Co., Limited, Berlin, Ont.
*Knechtel Furniture Co., Limited, The, Hanover, Ont.
*Waterloo Furniture Co., Limited, The, Waterloo, Ont.

692 COUCHES, Folding.

*Coombe & Watson, Kincardine, Ont.
*Elmira Upholstering Co., Limited, The, Elmira, Ont.
Stanyon Metallic Furniture Co., Limited, Toronto, Ont.
*Waterloo Furniture Co., Limited, The, Waterloo, Ont.

693 COUNTERS, Boot and Shoe.

See Stiffeners and Counters.

694 COUNTERS, Metal.

Office Specialty Mfg. Co., Limited, Toronto, Ont.

695 COUNTERS, Revolution.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

696 COUPLERS, Automatic Air and Steam.

Canadian Westinghouse Co., Limited, Hamilton, Ont.

697 COUPLERS, Car.

*Dominion Car & Foundry Co., Limited, Montreal, Que. (Adv. Inside Back Cover.)
*Holden, N. J., Co., Limited, Montreal, Que.
Pratt & Letchworth Co., Brantford, Ont.
Walkerville Malleable Iron Co., Limited, Walkerville, Ont.

698 COUPLINGS, Clutch and Cut-Off.

*Dodge Manufacturing Co., of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
Fleming, James, St. John, N.B.
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Matheson, I., & Co., Limited, New Glasgow N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
*Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861.)

699 COUPLINGS, Flanged.

Fleming, James, St. John, N.B.
*Goldie & McCulloch Co., Limited, Galt, Ont. (Adv. page 833.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

700 COUPLINGS, Hose.

Fleming, James, St. John, N.B.
*Garth Co., The, Montreal, Que.
Mitchell, The Robert, Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Smart, The Jas., Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
*Wilson & Cousins, Toronto, Ont.

701 COVERINGS, Furniture.

Ellis Furniture Co., The, Ingersoll, Ont.
Gold Medal Furniture Mfg. Co., Limited, Toronto, Ont.
Hees, Geo. H., Son & Co., Limited, Toronto, Ont.

702 COVERINGS, Mattress.

Montreal Quilting Co., Limited, The, Montreal, Que.

703 COVERING, Pipe & Boiler.

*Canadian Asbestos Co., Montreal, Que.
Eureka Mineral Wool & Asbestos Co., Toronto, Ont. (Adv. page 1012.)
*Garlock Packing Co., The, Hamilton, Ont.
Hamilton Engine Packing Co., Hamilton, Ont.

704 COVERS, Horse, Salvage and Wagon.

*Bromley & Hague, Limited, Winnipeg, Man.
Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
Edmonton Tent & Mattress Co., Limited, Edmonton, Alta.
Guelph Oiled Clothing Co., Limited, The, Guelph, Ont.
*Hague, Armington & Co., Limited, Winnipeg, Man.
Leckie, John, Limited, Toronto, Ont.
*Merchants Awning Co., Limited, Montreal, Que.
*Montreal Tent, Awning & Tarpaulin Co., Montreal, Que.
*Sonne, Thos., Sr., Montreal, Que.
*Tower Canadian Oiled Clothing Co., Limited, Toronto, Ont.
*Turner, J. J., & Sons, Peterboro, Ont.

705 COVERS, Table.

Hamilton Cotton Co., Hamilton, Ont. (Adv. page 870.)

706 CRADLES, Children's.

See Furniture, Bedroom.

707 CRADLES, Doll.

Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)

708 CRADLES, Grain.

*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont.
*Dominion Snath Co., The, Waterville, Que.
*Skinner Co., Limited, The, Gananoque, Ont.

709 CRANES, Electric and Travelling.

*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)
Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864.)
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Canadian Rand Co., Limited, Montreal, Que.
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Marsh & Henthorn, Belleville, Ont.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

710 CRANES, Hand-Power and Jib.

Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864.)
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

711 CRANES, Steam.

Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

712 CRANKSHAFTS AND CONNECTING RODS.

*Canada Forge Co., Limited, Welland, Ont. (Adv. page 1027.)

713 CRATES, Egg.

*Czerwinski Box Co., Limited, The, Winnipeg, Man.
Dowswell Mfg. Co., Limited, The, Hamilton, Ont.

714 CRATES, Fruit and Vegetable.

Barchard & Co., Limited, Toronto, Ont.
*Keenan Bros., Limited, Owen Sound, Ont.
Meyer-Thomas Co., Limited, The, Montreal, Que.
*Murray & Gregory, Limited, St. John, N.B.
Rutherford, The Wm., & Sons, Co., Montreal, Que.

715 CRAYONS, Paste and Lumber,

Hughes Owens Co., Limited, The, Montreal, Que.

716 CRAYONS, School and Iron Workers.

*Steward, D. M., Mfg. Co., of Canada, Limited, Toronto, Ont.

717 CREAM, Evaporated.

*Aylmer Condensed Milk Co., Limited, Aylmer, Ont.
*Charlottetown Condensed Milk Co., Limited, Charlottetown, P.E.I.
Ewing, S. H., & Sons, Montreal, Que.
*St. Charles Condensing Co., Ingersoll, Ont.
*Truro Condensed Milk Co., Limtied, Truro, N.S.

718 CREAM TARTAR.

Ewing, S. H., & Sons, Montreal, Que.
*Gillett, E. W., Co., Limited, Toronto, Ont.
*Greig, The Robert, Co., Limited, Toronto, Ont.
Mott, John P., & Co., Halifax, N.S.
Schwartz, W. H., & Sons, Halifax, N.S.

719 CREOSOTE.

*Dominion Tar & Chemical Co., Limited, The, Sydney, N.S.
*Standard Chemical Co., of Toronto, Limited, The, Toronto, Ont. (Adv. page 1032.)

720 CREMATORIES, Garbage.

Toronto Furnace & Crematory Co., Limited, Toronto, Ont.

721 CRESTINGS, Iron.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)
Northern Iron Works, Limited, Winnipeg, Man.
Shipway Iron, Bell & Wire Mfg. Co., Limited, Toronto, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Toronto Hardware Mfg. Co., Toronto, Ont.

722 CRESTINGS, Metal.

*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994 and 995.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.

723 CROCKERY.

*Belleville Pottery Co., Belleville, Ont.
*Gowans, Kent & Co., Limited, Toronto, Ont.

724 CROKINOLE BOARDS.

*Hourd & Co., Limited, London, Ont.
*Schultz Bros., Co., Limited, The, Brantford, Ont.

725 CROQUET SETS.

*Taylor, Scott & Co., Toronto, Ont.

726 CROSS ARMS.

Canadian General Electric Co., Limited, Toronto, Ont.
*Firstbrook Box Co., Limited, The, Toronto, Ont.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
*Lachute Shuttle Co., Limited, The, Lachute Mills, Que.
*Paquet & Godbout, St. Hyacinthe, Que.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry, & Co., Limited, Amherst, N.S.
*Rutherford, The Wm., & Sons, Co., Montreal, Que.

727 CROSSINGS (Diamond), for Railways.

*Canadian Ramapo Iron Works, Limited, Niagara Falls, Ont. (Adv. page 1021.)
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041.)

728 CROWBARS.

*Bailey-Underwood Co., Limited, New Glasgow, N.S.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Warnock, The James, Co., Limited, Galt, Ont.

729 CRUCIBLES.

Hamilton Facing Mill Co., Limited, Hamilton, Ont.

730 CRUSHERS, Clay.

See Machinery, Brick, etc.

731 CRUSHERS, Coke.

Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

732 CRUSHERS, Grain.

See Grinders, Grain.

733 CRUSHERS, Ore and Rock.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
*Brown Machine Co., The, New Glasgow, N.S.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Mussens, Limited, Montreal, Que.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

734 CRUSHERS, Rock (Portable).

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Sawyer & Massey Co., Limited, Hamilton, Ont.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

735 CUES, Billiard.

*May, Samuel & Co., Toronto, Ont. (Adv. page 1016.)

736 CULTIVATORS.

*Bailey-Underwood Co., Limited, New Glasgow, N.S.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Cockshutt Plow Co., Limited, Brantford, Ont.
*Faucher & Fils, Montreal, Que.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Maxwell, David, & Sons, St. Mary's, Ont.
*Noxon Co., Limited, The, Ingersoll, Ont.
*Paris Plow Co., Limited, The, Paris, Ont.
Shantz, P. E., Preston, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.
*Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)

737 CULTIVATORS, Spring Tooth.

*Cossitt Co., Limited, The, Brockville, Ont.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Hamilton, The Peter Co., Limited, Peterborough, Ont.
*International Harvester Co., of Canada, Limited, Hamilton, Ont. (Adv. page 848.)
*Massey Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Maxwell, David, & Sons, St. Mary's, Ont.
*Noxon Co., Limited, The, Ingersoll, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.

738 CUPS, Grease.

*Dodge Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Penberthy Injector Co., Limited, Windsor, Ont. (Adv. page 865.)

739 CUPS, Oil.

*Hamilton Brass Mfg. Co., Limited, The, Hamilton, Ont.
Mitchell, The Robt., Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Penberthy Injector Co., Limited, Windsor, Ont. (Adv. page 865.)

740 CUPS, Rubber Force.

*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

741 CURRY COMBS.

See Combs, Curry.

742 CURTAINS, Chenille.

Hamilton Cotton Co., Hamilton, Ont. (Adv. page 870.)

743 CURTAINS, Lace.

Hees, Geo. H., Son & Co., Limited, Toronto, Ont.

744 CURTAINS, Rubber.

*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)

745 CURTAINS, Theatre, Railway Car, etc.

*Holden, N. J., Co., Limited, Montreal, Que.
*Martel Stewart Co., Limited, The, Montreal, Que.

746 CUSHIONS.

*Alaska Feather & Down Co., Limited, The, Montreal, Que. (Adv. page 860.)
*Canadian Feather & Mattress Co., Limited, The, Toronto, Ont.
Textile Trimmings Co., The, Toronto, Ont.
Whitworth & Restall, Toronto, Ont.

747 CUSHIONS, Billiard Table.

*May, Samuel, & Co., Toronto, Ont. (Adv. page 1016.)

748 CUSHIONS, Boat.

Conboy Carriage Co., Limited, The, Toronto, Ont.
*Gidley, H. E., & Co., Penetanguishene, Ont.
*Merchants Awning Co., Limited, Montreal Que.
*Turner, J. J., & Sons, Peterboro, Ont.

749 CUSPIDORS, Brass.

*Garth Co., The, Montreal, Que.
*Hamilton Brass Mfg. Co., Limited, The, Hamilton, Ont.
*Jenking Brass Mfg. Co., Limited, Montreal, Que.
Mitchell, The Robt., Co., Limited, Montreal, Que.

750 CUTLERY.

Auto-Strop Safety Razor Co., Limited, The, Montreal, Que. (Adv. page 1013.)
*McGlashan, Clarke Co., Limited, Niagara Falls, Ont.
Meriden Britannia Co., Limited, Hamilton, Ont.
*Standard Silver Co., Limited, Toronto, Ont.
*Toronto Silver Plate Co., Limited, Toronto, Ont.

751 CUT-OUTS, Electric.

Canadian General Electric Co., Limited, Toronto, Ont.
*Munderloh & Co., Montreal, Que.
*Pringle, The R. E. T., Co., Limited, Montreal, Que.

752 CUTTERS, Bone.

London Foundry Co., Limited, The, London, Ont.

753 CUTTERS, Cloth.

See Machines, Cloth Cutting.

754 CUTTERS, Coal.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
*Canadian Rand Co., Limited, Montreal, Que.
McDugall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)

755 CUTTERS, Fish.

*Letson & Burpee, Limited, Vancouver, B.C.

756 CUTTERS, Milling.

Hamilton Tool Co., Limited, Hamilton, Ont. (Adv. page 828.)
*Pratt & Whitney Co., of Canada, Limited, Dundas, Ont.
*Stevens Co., of Galt, The, Galt, Ont. (Adv. page 1003.)

757 CUTTERS, Root.

*Maxwell, David, & Sons, St. Mary's, Ont.
Tolton Bros., Limited, Guelph, Ont.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.

758 CUTTERS, Straw, Ensilage, Feed and Band.

American-Abell Engine & Thresher Co., Limited, Toronto, Ont.
*Bell, B., & Son Co., Limited, St. George, Ont.
Bessette, La Cie, J. & S., Ltee., Iberville, Que.
Fleury's, J., Sons, Aurora, Ont.
*Gilson Mfg. Co., Limited, Guelph, Ont.
*Goodison, The John, Thresher Co., Limited, Sarnia, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.

Macdonald Mfg. Co., Stratford, Ont.
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Maxwell, David, & Sons, St. Mary's, Ont.
*Paris Plow Co., Limited, The, Paris, Ont.
Shantz, P. E., Preston, Ont.
*Sylvester Mfg. Co., Limited, Lindsay, Ont.
Waterloo Mfg. Co., Limited, Waterloo, Ont.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.
*Wilkinson Plough Co., Toronto, Ont.

759 CUTTERS, Tobacco.

*Banfield, W. H., & Sons, Toronto, Ont. (Adv. page 1048.)
Taylor-Forbes Co., Limited, Guelph, Ont.

760 CUTTERS (Vehicles).

*Armstrong, The J. B., Mfg. Co., Limited, Guelph, Ont. (Adv. page 996.)
*Borland Carriage Co., Limited, The, Stratford, Ont.
*Canada Carriage Co., The, Brockville, Ont.
Granby Carriage Co., The, Granby, Que.
*Gray, The Wm., & Sons Co., Limited, Chatham, Ont.
Ledoux Carriage Co., Limited, The, Montreal, Que.
McKie, The R., Buggy Co., Plattsville, Que.
*McLaughlin Carriage Co., Limited, Oshawa, Ont.
*Mount Forest Carriage Co., Limited, The, Mount Forest, Ont.
*Munro & McIntosh Carriage Co., Limited, The, Alexandria, Ont.
*Tudhope Carriage Co., Limited, The, Orillia, Ont.

761 CYLINDERS, Brass and Copper.

Booth Copper Co., Limited, The, Toronto, Ont.
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)

762 CYLINDERS, Brass Lined.

*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)

763 CYLINDERS, Dyers'.

Booth Copper Co., Limited, The, Toronto, Ont.

764 CYLINDERS, Engine.

*Drolet, F. X., Quebec, Que.
Fleming, James, St. John, N.B.
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Smart-Turner Machine Co., Limited, The Hamilton, Ont.

765 CYLINDERS, Pump, Brass, Iron and Porcelain.

*McDougall, The R., Co., Limited, Galt, Ont.
Miller Bros. & Toms, Montreal, Que.
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

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766 DAIRY SUPPLIES.

Kemp Mfg. Co., Toronto, Ont.
*Petrie Mfg. Co., Limited, The, Hamilton, Ont.
*Richardson, C., & Co., St. Mary's, Ont.

767 DAMPERS, Piano.

*Best, D. M., & Co., Toronto, Ont.
*Bohne, W., & Co., Toronto, Ont.
*Higel, The Otto, Co., Limited, Toronto, Ont.

768 DAMPERS, Stove Pipe.

*Gurney Foundry Co., Limited, Toronto, Ont.
Kemp Mfg. Co., Toronto, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Stewart, The James, Mfg. Co., Limited, Woodstock, Ont.
Taylor-Forbes Co., Limited, Guelph, Ont.

769 DASHES, Carriage.

*McKinnon Dash & Metal Works Co., Limited, St. Catharines, Ont. (Adv. page 826.)
*Walkerville Carriage Goods Co., Limited, The, Walkerville, Ont.

770 DAVENPORTS.

See Couches, Folding.

771 DECORATION, Interior.

See Paper, Wall or Hanging.

772 DEMOCRATS.

See Carriages.

773 DENIMS.

*Canadian Colored Cotton Mills Co., Limited, The, Montreal, Que. (Adv. page 846.)
Cornwall & York Cotton Mills Co., Limited, St. John, N.B.
Hamilton Cotton Co., Hamilton, Ont. (Adv. page 870.)
*Morrice, The D., Co., Limited, Montreal, Que.

774 DENTAL SUPPLIES.

*Hubbard, The C. H., Co., Limited, Toronto, Ont.

775 DERRICKS.

Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864.)
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Marsh & Henthorn, Belleville, Ont.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Robertson Machinery Co., Limited, The, Welland, Ont.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

776 DESIGNERS.

Alexander Engraving Co., The, Toronto, Ont.
Armac Press, The, Toronto, Ont.
*Canada Newspaper Syndicate, Limited, Montreal, Que.
*Caron Bros., Montreal, Que.
Central Press Agency, Limited, Toronto, Ont.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
Grip, Limited, Toronto, Ont. (Adv. page 1025.)
Guertin Printing Co., The, Montreal, Que.
*Jones, The J. L., Engraving Co., Toronto, Ont. (Adv. page 1036.)
Photo-Engravers, Limited, The, Toronto, Ont.
Standard Photo Engraving Co., Limited, The, Montreal, Que. (Adv. page 1043.)
*Toronto Engraving Co., Limited, Toronto, Ont.
*Toronto Lithographing Co., Limited, The, Toronto, Ont.

777 DESKS, Office (Standing & Flat Top).

Baird Bros., Plattsville, Ont.
Berlin Furniture Co., Limited, The, Berlin, Ont.
*Berlin Interior Hardwood Co., Limited, The, Berlin, Ont.
Canada Furniture Mfrs., Limited, Toronto, Ont.
*Canadian Office & School Furniture Co., Limited, The, Preston, Ont.
Dominion Office & Store Fitting Co., Limited, London, Ont.
*Globe-Wernicke Co., Limited, The, Stratford, Ont.
*Goderich Organ Co., Limited, The, Goderich, Ont.
*Library Bureau, of Canada, Limited, Ottawa, Ont. (Adv. page 848.)
*Malcolm, The Andrew, Furniture Co., Limited, Kincardine, Ont.
Office Specialty Mfg. Co., Limited, Toronto, Ont.
*Paquet & Godbout, St. Hyacinthe, Que.
*Preston Furniture Co., Limited, Preston, Ont.
*Snider, J. B., Waterloo, Ont.

778 DESKS, Roll Top.

Canada Furniture Mfrs., Limited, Toronto, Ont.
*Canadian Office & School Furniture Co., Limited, The, Preston, Ont.
*Goderich Organ Co., Limited, The, Goderich, Ont.
Office Specialty Mfg. Co., Limited, Toronto, Ont.
*Preston Furniture Co., Limited, Preston, Ont.
*Snider, J. B., Waterloo, Ont.

779 DESKS, School.

*Canadian Office & School Furniture Co., Limited, The, Preston, Ont.
Globe Furniture Co., Limited, The, Walkerville, Ont. (Adv. page 865.)
*Paquet & Godbout, St. Hyacinthe, Que.
Rhodes, Curry & Co., Limited, Amherst, N.S.
*Snider, J. B., Waterloo, Ont.
Spencer Bros. & Turner, Limited, Truro, N.S.
Vilas, W. F., Cowansville, Que.
Woodstock Lumber & Mfg. Co., Limited, The, Woodstock, Ont.

780 DESKS, Typewriter.

*Berlin Interior Hardwood Co., Limited, The, Berlin, Ont.
*Globe-Wernicke Co., Limited, The, Stratford, Ont.
*Library Bureau, of Canada, Limited, Ottawa, Ont. (Adv. page 848.)
Office Specialty Mfg. Co., Limited, Toronto, Ont.
*Preston Furniture Co., Limited, Preston, Ont.
*Snider, J. B., Waterloo, Ont.

781 DETECTORS, Time.

*Canadian Time Recorder Co., Limited, The, Toronto, Ont.
Wood, W. A., Montreal, Que. (Adv. page 857.)

782 DEXTRINE.

Hamilton Facing Mill Co., Limited, Hamilton, Ont.

783 DIAPHRAGMS, Canvas.

*Holden, N. J., Co., Limited, Montreal, Que.

784 DIAPHRAGMS, Rubber.

*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

785 DIARIES, Office and Pocket.

Brown Bros., Limited, The, Toronto, Ont. (Adv. page 867.)

786 DIES.

*Acme Can Works, Montreal, Que.
Armstrong, Mervin, Toronto, Ont.
*Banfield, W. H., & Sons, Toronto, Ont. (Adv, page 1048.)
*Bawden Machine & Tool Co., Toronto, Ont.
Brown, Boggs Co., Limited, The, Hamilton, Ont.
Gardner, Robt., & Son, Montreal, Que. (Adv. page 1043.)
Hamilton Stamp & Stencil Works, Limited, Hamilton, Ont.
*Letson & Burpee, Limited, Vancouver, B.C.
*Montreal Stencil Works, Montreal, Que. (Adv. page 1032.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.
Ontario Metal Novelty Mfg. Co., Limited, Toronto, Ont.
*Patterson & Heward, Toronto, Ont.
*Pratt & Whitney Co., of Canada, Limited, Dundas, Ont. (Adv. page 828.)
*Rolph & Clark, Limited, Toronto, Ont. (Adv. page 998.)
*Schaake Machine Works, Limited, The, New Westminster, B.C.
*Standard Contracting Co., Limited, Toronto, Ont.
*Superior Mfg. Co., The, Toronto, Ont. (Adv. page 866.)
*Thompson, J., & Son, Toronto, Ont.
Thomson Engraving Co., Toronto, Ont.
Toronto Stamp & Stencil Works, Toronto, Ont.
*Zock, J. J., & Co., Limited, Toronto, Ont.

787 DIES, Axle.

Jardine, A. B., & Co., Hespeler, Ont.

788 DIES, Bolt Threading and Pipe Cutting.

Armstrong, Mervin, Toronto, Ont.
Jardine, A. B., & Co., Hespeler, Ont.
*Pratt & Whitney Co., of Canada, Limited, Dundas, Ont. (Adv. page 828.)

789 DIES, Boot and Shoe Cutting.

*Rochette, C., Quebec, Que.

790 DIES AND TYPE, Wood Printing.

*Patterson & Heward, Toronto, Ont.

791 DIGESTORS, Pulp.

*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Polson Iron Works, Limited, Toronto, Ont. (Adv. page 1033.)
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

792 DIGGERS, Posthole.

Canada Foundry Co., Limited, Toronto (Adv. page 993.)
Otterville Mfg. Co., Limited, Otterville, Ont.

793 DIPS, Sheep.

*Dominion Tar & Chemical Co., Limited, The, Sydney, N.S.
*Zenner Disinfectant Co., Windsor, Ont.

794 DIRECTORIES.

*McAlpine Publishing Co., Limited, Halifax, N.S.
McAlpine, Chas. D., Toronto, Ont.
*Might Directories, Limited, Toronto, Ont.

795 DISINFECTANTS.

*Dominion Tar & Chemical Co., Limited, The, Sydney, N.S.
*Spooner, Alonzo W., Port Hope, Ont.
*Zenner Disinfectant Co., Windsor, Ont.

796 DISTILLERS (See also Alcohol).

*Boivin, Wilson, & Co., Montreal, Que.
*Gooderham & Worts, Limited, Toronto, Ont.
*Hamilton, J. S., & Co., Brantford, Ont.
Hirsch, J., & Sons, Limited, Montreal, Que.

797 DITCHERS.

Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864.)

Robertson Machinery Co., Limited, The, Welland, Ont.

798 DIVANS.
*Waterloo Furniture Co., Limited, The, Waterloo, Ont.

799 DOGS, Fire.
Hutchison, C. A., & Co., Montreal, Que.

800 DOGS, Lathe.
*Canadian Billings & Spencer, Limited, Welland, Ont. (Adv. page 1031.)

801 DOGS, Sawmill.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*McFarlane-Neill Mfg. Co., Limited, St. Mary's, N.B
*Pink, Thomas, Pembroke, Ont.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

802 DOOR SETS.
Belleville Hardware Co., Limited, The, Belleville, Ont.
*Peterborough Lock Mfg. Co., Limited, The, Peterborough, Ont.

803 DOORS, Fireproof.
Allith Mfg. Co., Limited, Hamilton, Ont.
Galt Art Metal Co., Limited, The, Galt, Ont. (Adv. page 1034.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Hutchison, C. A., & Co., Montreal, Que.
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995.)
*Ormsby, A. B, Limited, Toronto, Ont. (Adv. page 1039.)
*Parkin Elevator Co., Limited, The, Hespeler, Ont.
*Pedlar Metal Roofing Co., The, Oshawa, Ont.
*Riddell, John E., Hamilton, Ont.
Wheeler & Bain, Toronto, Ont.

804 DOORS, Hardwood and Veneered.
Anglin, S., & Co., Kingston, Ont.
Burton & Baldwin Mfg. Co., Limited, The, Hamilton, Ont.
Eaton, J. R., Orillia, Ont.
*Gilmour Door Co., Limited, The, Trenton, Ont.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
Stewart, Robert, Limited, Guelph, Ont.
*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042.)
Wilson Bros., Limited, Collingwood, Ont.

805 DOORS (Iron), Boiler, Brick Kiln, Furnace, etc.
Matheson, I.. & Co., Limited. New Glasgow, N.S. (Adv. page 862.)

806 DOORS, Screen.
See Screens, Window and Door.

807 DOORS, Vault.
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)

808 DOORS, Wood.
See Mills, Planing.

809 DOUBLETREES.
See Carriage Parts and Bent Goods.

810 DOWELS.
*Canada Wood Specialty Co., Limited, The, Orillia, Ont.
Davidson, James, Ottawa, Ont.
Kerr, J. & J., Co., Limited, Petrolia, Ont.
Otterville Mfg. Co., Limited, Otterville, Ont.
*Paquet & Godbout, St. Hyacinthe, Que.
*Schultz Bros. Co., Limited, The, Brantford, Ont.

811 DOWN CUSHIONS, Pillows and Quilts.
See Cushions, Pillows and Quilts.

812 DREDGES.
Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864.)
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
*Polson Iron Works, Limited, Toronto, Ont. (Adv. page 1033.)
Robertson Machinery Co., Limited, The, Welland, Ont.

813 DRESS GOODS, Cotton.
See Cottons.

814 DRESS GOODS, Woollen.
See Cloth.

815 DRESS SKIRTS.
See Skirts, Dress.

816 DRESSERS, Emery Wheel.
*Canadian Hart Wheels, Limited, Hamilton, Ont. (Adv. page 1019.)
*Prescott Emery Wheel Co., Limited, Prescott, Ont.

817 DRESSERS, Fur and Skin.
See Dyers, Fur and Skin.

818 DRESSES, Children's (Cotton).
See Whitewear.

819 DRESSING, Belt.
Crescent Oil Co., The, Hamilton, Ont.
*Dominion Belting Co., Limited, The, Hamilton, Ont. (Adv. page 871.)
Electric Boiler Compound Co., Limited, The, Guelph, Ont.
Eureka Mineral Wool & Asbestos Co., Toronto, Ont. (Adv. page 1012.)
*McColl Bros., & Co., Toronto, Ont.
*McLaren, The J. C., Belting Co., Montreal, Que. (Adv. page 1017.)
*Sadler & Haworth, Montreal, Que. (Adv. page 1002.)
Seward, The L. B., Lubricating Co., Ottawa, Ont.
*Sterne, G. F., & Sons, Brantford, Ont.

820 DRESSING, Carriage Top.
*Moore, Benjamin, & Co., Limited, West Toronto, Ont.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.

821 DRESSINGS, Harness.
American Dressing Co., Montreal, Que.
Domestic Specialty Co., Limited, Hamilton, Ont.
Nonsuch Mfg. Co., Limited, The, Toronto, Ont.
*Packard, L. H., & Co., Limited, Montreal, Que.
*Ralston, Robert & Co., Hamilton, Ont.
*Sultana Mfg. Co., Montreal, Que.

822 DRESSING, Shoe.
American Dressing Co., Montreal, Que.
*Dalley, F. F., Co., Limited, Hamilton, Ont.
Domestic Specialty Co., Limited, Hamilton, Ont.
Nonsuch Mfg. Co., Limited, The, Toronto, Ont.
*Packard, L. H., & Co., Limited, Montreal, Que.
*Pure Gold Mfg. Co., Limited, Toronto, Ont.
*Ralston, Robt., & Co., Hamilton, Ont.
*Sultana Mfg. Co., Montreal, Que.

823 DRILLS, Blacksmiths'.
Canadian Buffalo Forge Co., Limited, Montreal, Que.
Jardine, A. B., & Co., Hespeler, Ont.
London Foundry Co., Limited, The, London, Ont.
*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

824 DRILLS, Fertilizer.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*International Harvester Co., of Canada, Limited, Hamilton, Ont. (Adv. page 848.)
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.

825 DRILLS, Post.
Canadian Buffalo Forge Co., Limited, Montreal, Que.

826 DRILLS, Radial.
*Bertram, The John & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)
McGregor, Gourlay Co., Limited, The, Galt, Ont.
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)

827 DRILLS, Rock.
Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061)
Burrell Rock Drill Co., Limited, The, Belleville, Ont.
Canadian Rand Co., Limited, Montreal, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*Whitfield, The John, Co., Toronto, Ont.

828 DRILLS, Seed.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*International Harvester Co., of Canada, Limited, Hamilton, Ont. (Adv. page 848.)
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Noxon Co., Limited, The, Ingersoll, Ont.
*Sylvester Mfg. Co., Limited, Lindsay, Ont.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.
*Wilkinson Plough Co., Toronto, Ont.

829 DRILLS, Twist.
Jardine, A. B., & Co., Hespeler, Ont.
*Pratt & Whitney Co., of Canada, Limited, Dundas, Ont. (Adv. page 828.)
*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

830 DRILLS, Upright and Horizontal.
*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)
Gardner, Robt., & Son, Montreal, Que. (Adv. page 1043.)
Jardine, A. B., & Co., Hespeler, Ont.
London Machine Tool Co., Limited, The, Hamilton, Ont. (Adv. page 1016.)
McGregor, Gourlay Co., Limited, The, Galt, Ont.
McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)

831 DRIVERS, Pile.
Beatty, M., & Sons, Limited. Welland, Ont. (Adv. page 864.)
Brandon Machine Works Co., Limited, Brandon, Man.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Miller Bros. & Toms. Montreal, Que. (Adv. page 1041.)
Robertson Machinery Co., Limited, The, Welland, Ont.

832 DRIVERS, Screw.
Cowan & Britton, Gananoque, Ont.
*Cumming Mfg. Co., Limited, The, Renfrew, Ont.
*Gilmour Bros., & Co., Montreal, Que.
*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

833 DRUGGISTS' SUNDRIES.
Auto Strop Safety Razor Co., Montreal, Que. (Adv. page 1013.)
Briggs, G. C., & Son, Hamilton, Ont.
*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dominion Brush & Mirror Co., Limited, West Toronto, Ont.
Lyman Bros., & Co., Limited, The, Toronto, Ont. (Adv. page 1047.)
Lyman, Sons & Co., Montreal, Que.
Ontario Rubber Co., The, Toronto, Ont.
Stearns, Frederick & Co., Windsor, Ont.

834 DRUGS.
*Chemical Laboratories, Limited, Toronto, Ont.
Lyman Bros., & Co., Limited, The, Toronto, Ont. (Adv. page 1047.)
Lyman, Sons & Co.. Montreal, Que.
*National Drug & Chemical Co., of Canada, Limited, Montreal, Que.
*Parke, Davis & Co., Walkerville, Ont.

835 DRUMS, Hoisting.
Beatty M., & Sons, Limited, Welland, Ont. (Adv. page 864.)
Canada Foundry Co. Limited, Toronto, Ont. (Adv. page 993.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Matheson, I.. & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Robertson Machinery Co., Limited, The, Welland, Ont.

836 DRYERS.
Berry Bros., Limited, Walkerville, Ont.
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
*Imperial Varnish & Color Co., Limited. The, Toronto, Ont. (Adv. page 845.)
*International Varnish Co., Limited, Toronto, Ont. (Adv. page 859.)
Langmuir, James, & Co., Limited, Toronto, Ont.
Muirhead, A., Toronto, Ont.
*Ramsay, A., & Son Co., Montreal, Que.
*Scarfe & Co.. Brantford, Ont.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
Stephens, G. F., & Co., Limited, Winnipeg, Man.

837 DRYERS, Paper and Pulp.
Canadian Buffalo Forge Co., Limited, Montreal, Que.

838 DRYING APPARATUS.
Canadian Buffalo Forge Co., Limited, Montreal, Que.
Sheldons, Limited, Galt, Ont. (Adv. page 859.)
Toronto Furnace & Crematory Co., Limited, Toronto, Ont.

839 DUCK, Cotton, Sail and Waterproofed.
Imperial Cotton Co., Limited, Hamilton, Ont.

840 DUCKS, Harvester, Hose and Belting.
Imperial Cotton Co., Limited, Hamilton, Ont.

841 DUPLICATORS.
See Machines, Letter Duplicating.

842 DUSTERS, Automobile Lap.
Pugh Mfg. Co., The, Toronto, Ont.

843 DUSTERS, Wool & Waste.
*Karch, H. W., Hespeler, Ont.

844 DYERS, Cleaners and Finishers.
British American Dyeing Co., Montreal, Que.
Merchants Dyeing & Finishing Co., The, Toronto, Ont. (Adv. page 864.)

845 DYERS, Fur and Skin.
Excelsior Fur Dressing & Dyeing Works, Montreal, Que.
Schnaufer, F., Montreal, Que. (Adv. page 834.)

846 DYERS, Yarn.
Toronto Carpet Mfg. Co., Limited, Toronto, Ont.

847 DYERS' SUPPLIES.
Atteaux Dyestuff & Chemical Co., Limited, Toronto, Ont.

848 DYESTUFFS.
Atteaux Dyestuff & Chemical Co., Limited Toronto, Ont.
McArthur, Corneille & Co., Montreal, Que.

849 DYNAMITE.
*Acadia Powder Co., Limited, Halifax, N.S.
Giant Powder Co., Con., The, Victoria, B.C.
*Hamilton Powder Co., Montreal, Que.
Ontario Powder Co., Limited, Kingston, Ont.
Standard Explosives, Limited, Montreal, Que.

850 DYNAMOS.
Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
Canadian General Electric Co., Limited, Toronto, Ont.
Canadian Westinghouse Co., Limited, Hamilton, Ont.
Consolidated Electric Co., Limited, Toronto, Ont.
Eastman Machine Co., Limited, The, Toronto, Ont.
Electrical Construction Co., Limited, The, London, Ont.
*Forman, John, Montreal, Que.
Hinton Electric Co., Limited, The, Vancouver, B.C.
Jones & Moore Electric Co., Limited, Toronto, Ont.

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851 EARTHENWARE.
*Belleville Pottery Co., Belleville, Ont.
*Gowans, Kent & Co., Limited, Toronto, Ont.
Campbell's Sons, R., Hamilton, Ont.

852 EASELS.
Otterville Mfg. Co., Limited, Otterville, Ont.
*Phillips Mfg. Co., Limited, Toronto, Ont. (Adv. page 1000.)

853 EAVESTROUGH.
Aubry, A., & Fils, Montreal, Que.
Kemp Mfg. Co., Toronto, Ont.
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994 and 995.)
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.
Wheeler & Bain, Toronto, Ont.
Winnipeg Ceiling & Roofing Co., Winnipeg, Man.
*Wright, E. T., & Co., Hamilton, Ont.

854 ECONOMIZERS, Fuel.
*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)

855 EDGERS, Saw Mill.
*Gies, Philip, Berlin, Ont.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Plessisville, La Fonderie de, Plessisville, Que.
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
*St. John Iron Works, Limited, St. John, N.B.
Williams, The Madison, Mfg. Co., Limited, Lindsay, Ont.

856 EGGS, Pickled and Cold Storage.
*Georgian Bay Milling & Power Co., Limited, Meaford, Ont.
*Gunns, Limited, Toronto, Ont.
*Matthews, The Geo., Co., Limited, Peterborough, Ont.
*Park, Blackwell Co., Limited, Toronto, Ont.
Whyte Packing Co., Limited, The, Stratford, Ont.

857 EIDERDOWN GOODS.
*Alaska Feather & Down Co., Limited, The, Montreal, Que. (Adv. page 860.)
*Galt Knitting Co., Limited, Galt, Ont. (Adv. page 1042.)
*Newlands & Co., Galt, Ont.

858 EJECTORS.
Mitchell, The Robt. Co., Limited, Montreal, Que.
Penberthy Injector Co., Limited, Windsor, Ont. (Adv. page 865.)

859 ELASTIC.
*Cascade Narrow Fabric Co., Coaticook, Que.

860 ELBOWS, Stove Pipe.
Aubry, A., & Fils, Montreal, Que.
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
*Gurney Foundry Co., Limited, The, Toronto, Ont.
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994 and 995.)
*Wright, E. T., & Co., Hamilton, Ont.

861 ELBOWS, Union (Brass).
*Kerr Engine Co., Limited, The, Walkerville, Ont. (Adv. page 1033.)

862 ELECTRIC APPARATUS.
Ahearn & Soper, Limited, Ottawa, Ont.
Allis-Chalmers-Bullock, Limited, Montreal, Que.
Canadian General Electric Co., Limited, Toronto, Ont.
Canadian Westinghouse Co., Limited, Hamilton, Ont.
Consolidated Electric Co., Limited, Toronto, Ont.
Dominion Electrical Works, Limited, Halifax, N.S.
Dunn, J. A., & Co., Halifax, N.S.
Electrical Construction Co., Limited, The, London, Ont.
*Forman, John, Montreal, Que.
Hinton Electric Co., Limited, The, Vancouver, B.C.
Jones & Moore Electric Co., Limited, Toronto, Ont.
McDougall, The, John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
McGuire, W. J., Limited, Toronto, Ont. (Adv. page 1039.)
*Mechanics Supply Co., Quebec, Que.
*Munderloh & Co., Montreal, Que.
*Northern Electric & Mfg. Co., Limited, The, Montreal, Que. (Adv. page 842.)
*Norton Telephone Mfg. Co., Limited, Toronto, Ont. (Adv. page 1022.)
*Parkin Elevator Co., Limited, The, Hespeler, Ont.
*Pringle, The R. E. T., Co., Limited, Montreal, Que.
*Starr, John, Son & Co., Limited, Halifax, N.S.

863 ELECTRIC FIXTURES.
Bennett & Wright, Limited, The, Toronto, Ont.
Canadian General Electric Co., Limited, Toronto, Ont.
Castle & Son, Montreal, Que.
Dunn, J. A., & Co., Halifax, N.S.
Electrical Construction Co., Limited, The, London, Ont.
*Farquhar Bros., Halifax, N.S.
*Forman, John, Montreal, Que.
*Garth Co., The, Montreal, Que.
Jenkins Brass Mfg. Co., Limited, Montreal, Que.
*Keith & Fitzsimons Co., Limited, The, Toronto, Ont.
McGuire, W. J, Limited, Toronto, Ont. (Adv. page 1039.)
Mitchell, The Robt., Co., Limited, Montreal, Que.
Electrical Construction Co., Limited, The, London, Ont.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
*Munderloh & Co., Montreal, Que.
*Pringle, The R. E. T., Co., Limited, Montreal, Que.
Robertson, The James, Co., Limited, Montreal, Que.
*Starr, John, Son & Co., Limited, Halifax, N.S.

864 ELECTRICAL POWER PLANTS.
Canadian General Electric Co., Limited, Toronto, Ont.
Consolidated Electric Co., Limited, Toronto, Ont.
Electrical Construction Co., Limited, The, London, Ont.
*Forman, John, Montreal, Que.
McDougall, The, John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*Starr, John, Son & Co., Limited, Halifax, N.S.

865 ELECTRICAL SUPPLIES, Rubber.
*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)

866 ELECTROLIERS.
See Electric Fixtures.

867 ELECTROPLATE.
Birks, Henry, & Sons, Limited, Montreal, Que.
*Hemming Mfg. Co., Limited, Montreal, Que. (Adv. page 1013.)
*McGlashan, Clarke Co., Limited, Niagara Falls, Ont.
Meriden-Britannia Co., Limited, Hamilton, Ont.
*Standard Silver Co., Limited, Toronto, Ont.
*Toronto Silver Plate Co., Limited, Toronto, Ont.

868 ELECTROTYPERS.
Alexander Engraving Co., The, Toronto, Ont.
*Canada Newspaper Syndicate, Limited, Montreal, Que.
Central Press Agency, Limited, The, Toronto, Ont.
Grip, Limited, Toronto, Ont. (Adv. page 1025.)
*Jones, The J. L., Engraving Co., Toronto, Ont. (Adv. page 1036.)
Littlejohn & Vaughan, Limited, Toronto, Ont.
Mail Job Printing Co., Limited, The, Toronto, Ont.
Methodist Book & Publishing House, Toronto, Ont. (Adv. page 1010.)
*National Electrotype & Stereotype Co., Limited, The, Toronto, Ont.
Standard Photo Engraving Co., Limited, The, Montreal, Que. (Adv. page 1043.)
Stovel Co., The, Winnipeg, Man.
*Toronto Engraving Co., Limited, Toronto, Ont.
*Toronto Type Foundry Co., Limited, Toronto, Ont.

869 ELEVATORS, Factory, Passenger and Warehouse.
*Canadian Rand Co., Limited, Montreal, Que.
Darling Bros., Limited, Montreal, Que.
Dennis Wire & Iron Works Co., Limited, London, Ont.
*Meadows, The Geo. B., Toronto, Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)
Otis Fensom Elevator Co., Limited, Toronto, Ont. (Adv. page 1045.)
*Parkin Elevator Co., Limited, The, Hespeler, Ont.
*Schmidt & Co., Winnipeg, Man.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
Turnbull Elevator Mfg. Co., The, Toronto, Ont.
Watson, John, & Son, Montreal, Que.

870 ELEVATORS, Grain.
Canadian Bridge Co., Limited, The, Walkerville, Ont. (Adv. page 1044.)
*Goldie & McCulloch Co., Limited, Galt, Ont. (Adv. page 833.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)

871 ELEVATORS, Hand.
Darling Bros., Limited, Montreal, Que.
Otis Fensom Elevator Co., Limited, Toronto, Ont. (Adv. page 1045.)
Turnbull Elevator Mfg. Co., The, Toronto, Ont.

872 ELEVATORS, Portable.
Northern Iron Works, Limited, Winnipeg, Man.

873 ELEVATORS, Stone Crusher.
Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.

874 ELIXIRS, Medicinal.
Frosst, Chas. E., & Co., Montreal, Que.
*Parke, Davis & Co., Walkerville, Ont.
Saunders, W. E., & Co., London, Ont.

875 EMBLEMS, Society.
See Badges, Metal.

876 EMBOSSERS.
*Alexander & Cable Lithographing Co., Toronto, Ont.
Bulman Bros., Limited, Winnipeg, Man.
Davis & Henderson, Toronto, Ont.
Dawson, Chas. F., Limited, Montreal, Que.
Fortier, Joseph, Montreal, Que.
*Harris Lithographing Co., The, Toronto, Ont.
Hart & Riddell, Toronto, Ont.
*Knowles & Co., London, Ont.
*Lawson & Jones, Limited, London, Ont.
*Reason, H. T., & Co., London, Ont.
*Rolph & Clark, Limited, Toronto, Ont. (Adv. page 998.)
*Smith, The David, Engraving & Lithographing Co., Toronto, Ont.
*Toronto Lithographing Co., Limited, The, Toronto, Ont.
*Warwick Bros. & Rutter, Limited, Toronto, Ont.

877 EMBROIDERIES.
*Ladies' Wear, Limited, Toronto, Ont.
Rea, A. E., & Co., Limited, Toronto, Ont.

878 EMBROIDERY, Gold and Silver.
*Dominion Regalia Co., Limited, The, Toronto, Ont.
Mortimore & Blackeby, Toronto, Ont.

879 EMERY.
*Canadian Hart Wheels, Limited, Hamilton, Ont. (Adv. page 1019.)
*Prescott Emery Wheel Co., Limited, Prescott, Ont.

880 ENAMELLEDWARE.
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)

Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)
*Standard Ideal Co., Limited, The, Port Hope, Ont. (Adv. pages 873 and 874.)

881 ENAMELLEDWARE NOVELTIES.

See Jewelry, Enamelled.

882 ENAMELS.

*Brandram-Henderson, Limited, Montreal, Que., Halifax, N.S. (Adv. page 840.)
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
Domestic Specialty Co., Limited, Hamilton, Ont.
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
*International Varnish Co., Limited, Toronto, Ont. (Adv. page 809.)
Jamieson, R. C., & Co., Limited, Montreal, Que.
Langmuir, James & Co., Limited, Toronto, Ont.
*McCaskill, Dougall & Co., Montreal, Que. (Adv. page 1027.)
*Martin-Senour Co., Limited, The, Montreal, Que.
*Moore, Benjamin, & Co., Limited, West Toronto, Ont.
Muirhead, A., Toronto, Ont.
*Scarfe & Co., Brantford, Ont.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
Stephens, G. F., & Co., Limited, Winnipeg, Man.

883 ENCLOSURES, Elevator.

See Elevators, Factory, etc.

884 ENGINEERS.

*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Buffalo Forge Co., Limited, Montreal, Que.
*Dodge Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
*Gardner, Robt., & Son, Montreal, Que. (Adv. page 1043.)
*Goldie & McCulloch Co., Limited, Galt, Ont. (Adv. page 833.)
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Leonard, E., & Sons, London, Ont. (Adv. page 1047.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Moir, W. & A., Halifax, N.S.
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
*Owen Sound Iron Works Co., Limited, The, Owen Sound, Ont.
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
*Schaake Machine Works, Limited, The, New Westminster, B.C.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
*Standard Contracting Co., Limited, Toronto, Ont.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
Sydney Foundry & Machine Works, Limited, The, Sydney, N.S.
*White, The George, & Sons Co., Limited, London, Ont.
Weir, J. & R., Montreal, Que.

885 ENGINEERS' SUPPLIES.

Electric Boiler Compound Co., Limited, The, Guelph, Ont.
Hamilton Engine Packing Co., Hamilton, Ont.
*McAvity, T., & Sons, St. John, N.B.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Penberthy Injector Co., Limited, Windsor, Ont. (Adv. page 865.)
Somerville, Limited, Toronto, Ont. (Adv. Outside Back Cover.)

886 ENGINES, Automatic.

Bell, The Robert, Engine & Thresher Co., Limited, Seaforth, Ont.
*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
*Jones Underfeed Stoker Co., Limited, Montreal, Que.
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044.)
*Leonard, E., & Sons, London, Ont. (Adv. page 1047.)
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
Robertson Machinery Co., Limited, The, Welland, Ont.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
White, R. C., Montreal, Que.

887 ENGINES, Automobile.

See Engines, Gas and Gasoline.

888 ENGINES, Coal Oil.

*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Fairbanks Morse Canadian Mfg. Co., Limited, Toronto, Ont. (Adv. page 1064.)

889 ENGINES, Corliss.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044.)
*Leonard, E., & Sons, London, Ont. (Adv. page 1047.)
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
Stuart Machinery Co., Limited, The, Winnipeg, Man.

890 ENGINES, Fire (Chemical).

Brandon Machine Works Co., Limited, Brandon, Man.
*Seagrave, W. E., Walkerville, Ont.
Smith Bros., Toronto, Ont.

891 ENGINES, Fire (Steam).

*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

892 ENGINES, Gas and Gasoline.

*Adams Launch & Engine Mfg. Co., Penetang, Ont. (Adv. page 862.)
*Bawden Machine & Tool Co., Toronto, Ont.
Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.
*Berg Brick Machinery Co., Limited, Toronto, Ont.
*Brandon Machine Works Co., Limited, Brandon, Man.
*Canada Cycle & Motor Co., Limited, West Toronto, Ont. (Adv. opp. Inside Back Cover.)
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Gas Power & Launches, Limited, Toronto, Ont.
Canadian Westinghouse Co., Limited, Hamilton, Ont.
Doherty Mfg. Co., Limited, Sarnia, Ont.
*Fairbanks Morse Canadian Mfg. Co., Limited, Toronto, Ont. (Adv. page 1064.)
Fleming, James, St. John, N.B.
*Ford Motor Co., of Canada, Limited, The, Walkerville, Ont. (Adv. page 829.)
*Gilson Mfg. Co., Limited, Guelph, Ont.
*Goold, Shapley & Muir Co., Limited, Brantford, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que.
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)
*Schaake Machine Works, Limited, The, New Westminster, B.C.
Schofield-Holden Machine Co., Limited, Toronto, Ont.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
*Stratford Mill Building Co., Limited, The, Stratford, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
Waterloo Mfg. Co., Limited, Waterloo, Ont.

893 ENGINES, Hoisting, Hauling and Winding.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864.)
*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
*Brown Machine Co., The, New Glasgow, N.S.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Doty Engine Works Co., Limited, The, Goderich, Ont.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Mussens, Limited, Montreal, Que.
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
Niagara Falls Machine & Foundry Co., Limited, Niagara Falls, Ont. (Adv. page 1028.)
*Oil Well Supply Co., Limited, Petrolia, Ont.
Robertson Machinery Co., Limited, The, Welland, Ont.
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
*Vancouver Engineering Works, Limited, Vancouver, B.C.
White, R. C., Montreal, Que.

894 ENGINES, Marine.

*Adams Launch & Engine Mfg. Co., The, Penetang, Ont. (Adv. page 862.)
*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
*British Columbia Marine Railways Co., Limited, Victoria, B.C.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Buffalo Forge Co., Limited, Montreal, Que.
Canadian Shipbuilding Co., Limited, Toronto, Ont.
*Collingwood Shipbuilding Co., Limited, Collingwood, Ont.
*Doty Engine Works Co., Limited, The, Goderich, Ont.
*Drolet, F. X., Quebec, Que.
Fleming, James, St. John, N.B.
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Moir, W. & A., Halifax, N.S.
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
*Owen Sound Iron Works Co., Limited, Owen Sound, Ont.
Oxford Foundry & Machine Co., Oxford, N.S.
*Polson Iron Works, Limited, Toronto, Ont. (Adv. page 1033.)
Robertson Machinery Co., Limited, The, Welland, Ont.
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
*Schaake Machine Works, Limited, The, New Westminster, B.C.
Schofield-Holden Machine Co., Limited, Toronto, Ont.
Smart-Turner Machine Co., Limited, Hamilton, Ont.
*Stewart, Bruce & Co., Charlottetown, P.E.I.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
Sydney Foundry & Machine Works, Limited, The, Sydney, N.S.
White, R. C., Montreal, Que.

895 ENGINES, Portable.

*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Canadian Buffalo Forge Co., Limited, Montreal, Que.
*Doty Engine Works Co., Limited, The, Goderich, Ont.
*Drolet, F. X., Quebec, Que.
*Fairbanks Morse Canadian Mfg. Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Goold, Shapley & Muir Co., Limited, Brantford, Ont.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Leonard, E., & Sons, London, Ont. (Adv. page 1047.)
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
New Burrell-Johnson Iron Co., Limited, The, Yarmouth N.S.
Norsworthy, C., & Co., St. Thomas, Ont.
Oxford Foundry & Machine Co., Oxford, N.S.
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
*Stratford Mill Building Co., Limited, The, Stratford, Ont.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)
Waterloo Mfg. Co., Limited, Waterloo, Ont.
White, R. C., Montreal, Que.

896 ENGINES, Producer Gas.

*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Fairbanks Morse Canadian Mfg. Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
Waterloo Mfg. Co., Limited, Waterloo, Ont.

897 ENGINES, Pumping, Waterworks, etc.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Buffalo Forge Co., Limited, Montreal, Que.
*Fairbanks Morse Canadian Mfg. Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
*Goold, Shapley & Muir Co., Limited, Brantford, Ont.
Inglis, The John Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que (Adv. page 1061.)
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)
White, R. C., Montreal, Que.

898 ENGINES, Stationary, Horizontal and Vertical (Steam).

*Bawden Machine & Tool Co., Toronto, Ont.
Bell, The Robert, Engine & Thresher Co., Limited, Seaforth, Ont.
*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Brandon Machine Works Co., Limited, Brandon, Man.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Collingwood Shipbuilding Co., Limited, Collingwood, Ont.
*Drolet, F. X., Quebec, Que.
Fleming, James, St. John, N.B.
*Gies, Philip, Berlin, Ont.
*Goldie & McCulloch Co., Limited, Galt, Ont. (Adv. page 833.)
*Goold, Shapley & Muir Co., Limited, Brantford, Ont.
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Jones Underfeed Stoker Co., Limited, Montreal, Que.
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044.)
*Leonard, E., & Sons, London, Ont. (Adv. page 1047.)
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
McDougall, The John, Caledonian Iron Works, Limited, The, Montreal, Que. (Adv. page 1061.)
McGregor, Thos. B., Windsor, Ont.
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Moir, W. & A., Halifax, N.S.
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
Norsworthy, C., & Co., St. Thomas, Ont.
*Owen Sound Iron Works Co., Limited, Owen Sound, Ont.
Oxford Foundry & Machine Co., Oxford, N.S.
Park Bros., Chatham, Ont.
Plessisville, La Fonderie de, Plessisville, Que.
*Polson Iron Works, Limited Toronto, Ont. (Adv. page 1033.)
*Robb Engineering Co., Limited Amherst, N.S. (Adv. page 858.)
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
*St. John Iron Works, Limited, St. John, N.B.
*Schaake Machine Works, Limited, The, New Westminster, B.C.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
*Stewart, Bruce, & Co., Charlottetown, P.E.I.
*Stratford Mill Building Co., Limited, The, Stratford, Ont.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
Sydney Foundry & Machine Works, Limited, The, Sydney, N.S.
*Vancouver Engineering Works, Limited, Vancouver, B.C.
Vulcan Iron Works, Limited, The, Winnipeg, Man.
*Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861.)
*White, The George, & Sons Co., Limited, London, Ont.
White, R. C., Mentreal, Que.
*Whitfield, The John, Co., Toronto, Ont.

899 ENGINES (Threshing), Traction and Portable.

American-Abell Engine & Thresher Co., Limited, Toronto, Ont.
Bell, The Robert, Engine & Thresher Co., Limited, Seaforth, Ont.
*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Brandon Machine Works Co., Limited, Brandon, Man.
*Drolet, F. X., Quebec, Que.
*Goodison, The John, Thresher Co., Limited, Sarnia, Ont.
Macdonald Mfg. Co., Stratford, Ont.
New Hamburg Mfg. Co., Limited, New Hamburg, Ont.
Park Bros., Chatham, Ont.
Robertson Machinery Co., Limited, The, Welland, Ont.
Sawyer & Massey Co., Limited, Hamilton, Ont.
Waterloo Mfg. Co., Limited, Waterloo, Ont.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)
*White, The George, & Sons Co., Limited, London, Ont.

900 ENGINES, Turbine.

See Turbines.

901 ENGRAVERS, Jewelry.

Birks, Henry, & Sons, Limited, Montreal, Que.
Campbell, W. R., & S. A., Winnipeg, Man.
*Ellis, P. W., & Co., Limited, Toronto Ont. (Adv. page 855.)
*Lees, Geo. H., & Co., Hamilton, Ont.
*Zock, J. J., & Co., Limited, Toronto, Ont.

902 ENGRAVERS, Music.

*Whaley, Royce Co., Limited, Toronto, Ont.

903 ENGRAVERS, Steel and Copperplate.

*Alexander & Cable Lithographing Co., Limited, Toronto, Ont.
*American Bank Note Co., Ottawa, Ont.
British American Bank Note Co., Limited, Ottawa, Ont. (Adv. page 1017.)
Bulman Bros., Limited, Winnipeg, Man.
Consolidated Lithographing & Mfg. Co., Limited, The, Montreal, Que. (Adv. page 997.)
*Harris Lithographing Co., The, Toronto, Ont.
Hart & Riddell, Toronto, Ont.
*Knowles & Co., London, Ont.
London Printing & Lithographing Co., The, London, Ont.
*Rolph & Clark, Limited, Toronto, Ont. (Adv. page 998.)
*Smith, The David, Engraving & Lithographing Co., Toronto, Ont.
Thomson Engraving Co., Toronto, Ont.

904 ENGRAVERS, Wood.

Alexander Engraving Co., The, Toronto, Ont.
Bulman Bros., Limited, Winnipeg, Man.
Grip, Limited, Toronto, Ont. (Adv. page 1025.)
*Jones, The J. L., Engraving Co., Toronto, Ont. (Adv. page 1036.)
*Knowles & Co., London, Ont.
*National Electrotype & Stereotype Co., Limited, Toronto, Ont.
Ontario Engraving Co., Hamilton, Ont.
*Rolph & Clark, Limited, Toronto, Ont. (Adv. page 998.)
*Smith, The David, Engraving & Lithographing Co., Toronto, Ont.
Thomson Engraving Co., Toronto, Ont.
*Toronto Engraving Co, Limited, Toronto. Ont.
*Toronto Lithographing Co., Limited, The, Toronto, Ont.

905 ENGRAVING IN COLORS.

Grip, Limited, Toronto Ont. (Adv. page 1025.)
Ontario Engraving Co., Hamilton, Ont.
*Toronto Engraving Co., Limited, Toronto, Ont.

906 ENGRAVING, Map.

Bulman Bros., Limited, Winnipeg, Man.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
*McAlpine Publishing Co., Halifax, N.S.
*Toronto Lithographing Co., Limited, Toronto, Ont.

907 ENGRAVING, Photo, Half-Tone and Line on Copper or Zinc.

*Alexander & Cable Lithographing Co., Limited, Toronto, Ont.
Alexander Engraving Co., The, Toronto, Ont.
*Benallack Lithographing & Printing Co., The, Montreal, Que.
*Canada Newspaper Syndicate, Limited, Montreal, Que.
Central Press Agency, Limited, The, Toronto, Ont.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
*Desbarats & Co., Montreal, Que.
*Colonist Printing & Publishing Co., Limited, The, Victoria, B.C.
Grip, Limited, Toronto, Ont. (Adv. page 1025.)
*Jones, The J. L., Engraving Co, Toronto, Ont. (Adv. page 1036.)
London Printing & Lithographing Co., The, London, Ont.
Mail Job Printing Co., Limited, The, Toronto, Ont.
Mortimer Co., Limited, The, Ottawa, Ont.
*National Electrotype & Stereotype Co., Limited, The, Toronto, Ont.
Ontario Engraving Co., Hamilton, Ont.
Photo-Engravers, Limited, The, Toronto, Ont.
*Rolph & Clark, Limited, Toronto, Ont. (Adv. page 998.)
Standard Photo Engraving Co., Limited, The, Montreal, Que. (Adv. page 1043.)
Stovel Co., The, Winnipeg, Man.
Thomson Engraving Co., Toronto, Ont.
*Toronto Engraving Co., Limited, Toronto, Ont.

908 ENVELOPES.

Barber & Ellis Co., Limited, The, Toronto, Ont. (Adv. page 1046.)
*Bouvier, L. P., Toronto, Ont.
Buntin, Gillies & Co., Limited, Hamilton, Ont.
Canada Envelope Co., Limited, Montreal, Que.
Davis & Henderson, Toronto, Ont.
Dawson, Chas. F., Limited, Montreal, Que.
Dawson, W. V., & Co., Montreal, Que.
Dominion Envelope Co., Limited, Toronto, Ont.
*"5-in-1" Letter Envelope Co., Limited, The, Toronto, Ont.
*Gage, W. J., & Co., Limited, Toronto, Ont.
*Harris Lithographing Co., The, Toronto, Ont.
Hart & Riddell, Toronto, Ont.
Knapp Envelope Co., Toronto, Ont.
*Knowles & Co., London, Ont.
*Lawson & Jones, Limited, London, Ont.
Morton, Phillips & Co., Montreal, Que.
*Reason, H. T., & Co., London, Ont.
*Rolph & Clark, Limited, Toronto, Ont. (Adv. page 998.)

909 ENVELOPES, Tag.

*Morton Co., Limited, The, Toronto, Ont. (Adv. page 852.)

910 EPITAPHS, Cast Iron.

*Belanger, A., Montmagny, Que.

911 ERASERS, Blackboard.

Hendry, The Geo. M. Co., Limited, Toronto, Ont.

912 ERASERS, Rubber.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)

913 ESCUTCHEONS.

*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
*Hahn Brass Co., Limited, The, New Hamburg, Ont.

914 ESSENCES.

See Extracts, Flavoring.

915 EVAPORATORS, Sap and Fruit.

*Belanger, A., Montmagny, Que.
*Biggs Fruit and Produce Co., Limited, Burlington, Ont.
*Brown, Boggs Co., Limited, The, Hamilton, Ont.
Grimm Mfg. Co., The, Montreal, Que.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

916 EXCAVATORS.

Harris, J. W., Mfg. Co., Ltd., Montreal, Que.

917 EXCELSIOR.

B. C. Bedding and Upholstery Co., Limited, Vancouver, B.C.
Delany & Pettit Co., Limited, The, Toronto, Ont. (Adv. page 1037.)
*Heaps, E. H., & Co., Vancouver, B.C.
*Rider & Kitchener Co., Limited, The, Lindsay, Ont.
Rutherford, The Wm., & Sons Co., Montreal, Que.

918 EXHAUSTERS, Planing Mill.

Sheldons, Limited, Galt, Ont. (Adv. page 859.)

919 EXPANDERS, boiler tube.

*Babcock & Wilcox, Limited, Montreal Que. (Adv. page 851).
Jardine, A. B., & Co., Hespeler, Ont.

920 EXPLOSIVES.

See Dynamite.

921 EXTINGUISHERS, Fire.

*Garth Co., The, Montreal, Que.
McGuire, W. J., Limited, Toronto, Ont. (Adv. page 1039.)
Macdonald Mfg. Co., Limited, Toronto, Ont. (Adv. page 857.)
Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)
Standard Automatic Fire Sprinkler Co., Limited, The, Montreal, Que. ((Adv. page 1005.)
*Wilson & Cousins, Toronto, Ont.

922 EXTRACTORS AND FILTERS, Oil.

Darling Bros., Limited, Montreal, Que.

923 EXTRACTS, Beef.

See Beef, extract of.

924 EXTRACTORS, Stump.

*Whitfield, The, John Co., Toronto, Ont.

925 EXTRACTS, Flavoring.

Barbour, G. E., Co., Limited, St. John, N.B.
Blackwoods, Limited, The, Winnipeg, Man.
Blue Ribbon, Limited, Winnipeg, Man.
*Capstan Mfg. Co., Toronto, Ont.
Codville Co., Limited, The, Winnipeg, Man.
Cowan, John, Co., Limited, Montreal, Que.
*Dalley, The, F. F. Co., of Hamilton, Limited, Hamilton, Ont.
Dalton Bros., Toronto, Ont.
*Downey, W. P., Montreal, Que.
Drake, Francis, New Glasgow, N.S.
Drewry, Edward L., Winnipeg, Man.
*Dunn, Wm. H., Montreal, Que.
Dyson Co., The, Winnipeg, Man.
*Gorman, Eckert & Co., Limited, London, Ont.
*Greig, The Robert, Co., Limited, London, Ont.
Hutchinson & Peterson, Toronto, Ont.
Imperial Extract Co., Toronto, Ont.
Lytle, The, T. A. C., Limited, Toronto, Ont.
McLarens, Limited, Hamilton, Ont.
*National Drug and Chemical Co. of Canada, Limited, Montreal, Que.

Patrick, W. G., & Co., Toronto, Ont.
*Pure Gold Mfg. Co., Limited, Toronto, Ont.
*Seely Mfg. Co., Windsor, Ont.
*Smith, J., Hungerford Co., Limited, Toronto, Ont.
Stearns, Frederick, & Co., Windsor, Ont.
White Star Mfg. Co., The, Winnipeg, Man.

926 EXTRACTS, Fluid, Solid and Powdered.
Frosst, Chas. E., & Co., Montreal, Que.
*Parke, Davis & Co., Walkerville, Ont.
Saunders, W. E., & Co., London, Ont.
Stearns, Frederick, & Co., Windsor, Ont.

927 EXTRACT, Malt.
*O'Keefe Brewery Co., of Toronto, Limited, The, Toronto, Ont.
Reinhardt & Co., Toronto, Ont.
Sleeman & Sons, Guelph, Ont.
Walkerville Brewing Co., Limited, The, Walkerville, Ont.

928 EYE-BOLTS.
*Canadian Billings & Spencer, Limited, Welland, Ont (Adv. page 1031).

929 EYE-GLASSES.
*Consolidated Optical Co., Limited, Toronto, Ont.

F

930 FACINGS, Foundry.
Hamilton Facing Mill Co., Limited, Hamilton, Ont.

931 FANNING MILLS.
See Mills, fanning.

932 FAN AND EXHAUST SYSTEMS.
Canadian Buffalo Forge Co., Limited, Montreal, Que.
Hamilton Facing Mill Co., Limited, Hamilton, Ont.
*Jones Underfeed Stoker Co., Limited, Montreal, Que.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Matthews, A., Toronto, Ont.
Sheldons, Limited, Galt, Ont. (Adv. page 859.)

933 FANS, Electric.
Canadian General Electric Co., Limited, Toronto, Ont.
Canadian Buffalo Forge Co., Limited, Montreal, Que.
Canadian Westinghouse Co., Limited, Hamilton, Ont.

934 FANS, Ventilating.
See Fans and Exhaust Systems.

935 FARINA.
*Tillson Co., Limited, The, Tillsonburg, Ont.

936 FARINA, Potato.
*Prowse & Sons, Murray Harbor, P.E.I.

937 FASTENERS, Belt.
Crescent Oil Co., The, Hamilton, Ont.
*McLaren, The J. C., Belting Co., Montreal, Que. (Adv. page 1017.)

938 FASTENERS, Box Corner.
*Banfield, W. H., & Sons, Toronto, Ont. (Adv. page 1048.)

939 FASTENERS, Door, Window, Shutter, etc.
Belleville Hardware Co., Limited, Belleville, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Peterborough Lock Mfg. Co., Limited, The, Peterborough, Ont.

940 FAUCETS, Compression, Bath, Basin, Beer, Plumbers, etc.
*Mitchell, The Robert, Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

941 FAUCETS, Petroleum.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

942 FEATHER GOODS.
See Cushions; Pillows; Quilts.

943 FEATHERBONE.
Reid, The A. T., Co., Limited, Toronto, Ont.

944 FEATHERS.
Alaska Feather & Down Co., Limited, Montreal, Que. (Adv. page 860.)
Dominion Flower & Feather Mfg. Co., The, Montreal, Que.
Whitworth & Restall, Toronto, Ont.

945 FEEDS.
*Campbell, The John, Co., Limited, St Thomas, Ont.
*Columbia Flouring Mills Co., Limited, Enderby, B.C.
Dominion Millers' Association, Toronto, Ont.
*Dwyer, W. H. Co., Limited, Ottawa, Ont.
*Edmonton Milling Co., Limited, The, Strathcona, Alta.
*Georgian Bay Milling & Power Co., Limited, Meaford, Ont.
*Goldie, The Jas., Co., Limited, Guelph, Ont.
Johnson & McDonald, New Glasgow, N.S.
McCann, Knox Milling Co., Limited, Toronto, Ont.
*Noble, Robert, Norval, Ont.
*Ogilvie Flour Mills Co., Limited, Montreal, Que.
*Pakenham, C. E., & Son, Norwood, Ont.
Pearce Co., Limited, The, Marmora, Ont.
*Seaforth Milling Co., Seaforth, Ont.
*St. John Milling Co., Limited, West St. John, N.B.
Taylor, The T. H., Co., Limited, Chatham, Ont.
*Western Milling Co., Limited, Calgary, Alta.
*Wilson, James, & Sons, Fergus, Ont.
*Woodstock Cereal Co., Limited, The, Woodstock, Ont.

946 FEEDERS, Ore.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.

947 FEEDERS, Self.
See Machines, threshing.

948 FELSPAR, Ground.
*Electric Reduction Co., Limited, The, Buckingham, Que.

949 FELT, Boot and Shoe.
Berlin Felt Boot Co., Limited, Berlin, Ont.

950 FELT, Carpet.
Ford, Jos., & Co., Portneuf Station, Que.
Lockerby & McComb, Montreal, Que. (Adv. page 1047.)
*McArthur, Alex., & Co., Limited, Montreal, Que. (Adv. page 1040.)
*Montreal Paper Co., St. Basile, Que.
Paterson Mfg. Co., Limited, The, Toronto, Ont.
Stutt, James, & Sons, West Flamboro, Ont.

951 FELT, Cotton and Jute.
Bauer, A., & Co., Waterloo, Ont.
*Smith Mfg. Co., Limited, The, Toronto, Ont.

952 FELT, Hair.
Berlin Felt Boot Co., Limited, Berlin, Ont.

953 FELTS, Paper Makers' and Laundry.
Hemelin & Ayers Co., Limited, The, Lachute Mills, Que.
Penmans, Limited, Paris Ont. (Adv. page 1063.)

954 FELT, Roofing and Tarred for Building Purposes.
*Brantford Roofing Co., Limited, Brantford, Ont.
Ford, Jos., & Co., Portneuf Station, Que.
Hamelin & Ayers Co., Limited, The, Lachute Mills, Que.
*McArthur, Alex., & Co., Limited, Montreal, Que. (Adv. page 1040.)
*Merrick-Anderson Co., Winnipeg, Man.
*Montreal Paper Co., St. Basile, Que.
Paterson Mfg. Co., Limited, The, Toronto, Ont.
Stutt, James, & Sons, West Flamboro, Ont.
*Walker, J. R., & Co., Montreal, Que. (Adv. page 846.)

955 FELT, Tarred.
Lockerby & McComb, Montreal, Que. (Adv. page 1047.)
*McArthur, Alex., & Co., Limited, Montreal, Que. (Adv. page 1040.)

956 FENCE, Metal, Ornamental.
*Belanger, A., Montmagny, Que.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Frost Wire Fence Co., Limited, Hamilton, Ont.
*London Fence Machine Co., Limited, London, Ont.
*Meadows, The Geo. B., Toronto, Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)
*McGregor Banwell Fence Co., Limited, The, Walkerville, Ont. (Adv. page 1037.)
*Munroe Wire Works, Limited, New Glasgow, N.S.
Northern Iron Works, Limited, Winnipeg, Man.
*Page Wire Fence Co., Limited, The, Walkerville, Ont.
*Schmidt & Co., Winnipeg, Man.
Western Iron Works, Limited, Winnipeg, Man.

957 FENCING, Barbed and Plain Twist.
Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)

958 FENCING, Wire (Woven).
*Anthony Wire Fence Co., Limited, The, Walkerville, Ont. (Adv. page 1030).
*Banwell Hoxie Wire Fence Co., Limited, The, Hamilton, Ont.
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv page 1043).
Frost Wire Fence Co., Limited, Hamilton, Ont.
Great West Wire Fence Co., Limited, The, Winnipeg, Man.
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044).
*London Fence Machine Co., Limited, London, Ont.
*McGregor Banwell Fence Co., Limited, The, Walkerville, Ont. (Adv. page 1037).
Manitoba Anchor Wire Fence Co., Limited, The, Winnipeg, Man.
*Munro Wire Works, Limited, New Glasgow, N.S.
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009).
New Brunswick Fence Co., Limited, The, Moncton, N.B.
Owen Sound Wire Fence Co., Limited, Owen Sound, Ont.
*Page Wire Fence Co., Limited, The, Walkerville, Ont.
Pittsburgh Perfect Fence Co., Limited, Hamilton, Ont.

959 FENCING, Wrought Iron.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993).
Canadian Ornamental Iron Co., Toronto, Ont.
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043).
Fleming, James, St. John, N.B.
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009).
Northern Iron Works, Limited, Winnipeg, Man.
Shipway Iron, Bell & Wire Mfg. Co., Limited, Toronto, Ont.
Watson, John, & Son, Montreal, Que.
Western Iron Works, Limited, Winnipeg, Man.

960 FENDERS, Brass, Iron and Wire.
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043).
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044).
Mitchell, The Robt. Co., Limited, Montreal, Que.

961 FENDERS, Cutter and Carriage.
Heard, John, & Co., St. Thomas, Ont.
*McKinnon Dash & Metal Works Co., Limited, St. Catharines, Ont. (Adv. page 826).
*Walkerville Carriage Goods Co., Limited, The, Walkerville, Ont.

962 FENDERS, Yacht.
Leckie, John, Limited, Toronto, Ont.

963 FERRULES.
*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).

964 FERTILIZERS, Bone, Mineral, Chemical, Etc.
Canada Chemical Mfg. Co., Limited, The, London, Ont. (Adv. page 1033).
*Canada Glue Co., Limited, Brantford, Ont.
Capelton Chemical & Fertilizer Co., Buckingham, Que.
*Carritte, de B., St. John, N.B.
Freeman, The W. A. Co., Limited, Hamilton, Ont.
Harris, W., & Co., Toronto, Ont.
*Martin, The D. B., Co., Limited, West Toronto, Ont.
*Nova Scotia Fertilizer Co., The, Halifax, N.S.
Victoria Chemical Co., Limited, Victoria, B.C.

965 FERTILIZER, Slaughter House.
*Canadian Packing Co., Limited, The, London, Ont.
*Davies, The Wm., Co., Limited, Toronto, Ont.
*Harris Abattoir Co., Limited, The, Toronto, Ont.
*O'Mara, Joseph, Palmerston, Ont.

966 FIGURES, Wax.
Clatworthy & Son, Toronto, Ont.

967 FILES, Office.
Davis & Hendersan, Toronto, Ont.
Dawson, Chas. F., Limited, Montreal, Que.
*Eclipse Mfg. Co., Limited, The, Ottawa, Ont.
*Globe-Wernicke Co., Limited, The, Stratford, Ont.
*Library Bureau of Canada, Limited, Ottawa, Ont. (Adv. page 848).
Office Specialty Mfg. Co., Limited, Toronto, Ont.

968 FILES, Rasps, etc.
*Disston, Henry, & Sons, Limited, Toronto, Ont.
*Nicholson File Co., Port Hope, Ont. (Adv. page 839).

969 FILLERS, Egg Case.
*Gilmour Door Co., Limited, The, Trenton, Ont.
Major Mfg. Co., Limited, The, Montreal, Que.
*Miller Bros. Co., Limited, The, Montreal, Que.

970 FILLERS, Wood.
Berry Bros., Limited, Walkerville, Ont.
*Brandram-Henderson, Limited, Montreal, Que. (Adv. page 840)
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027).

*Imperial Varnish & Color Co., Limited, Toronto, Ont. (Adv. page 845).
Jamieson, R. C., & Co., Limited, Montreal, Que.
*Martin-Senour Co., Limited, The, Montreal, Que.
*Moore, Benjamin & Co., Limited, West Toronto, Ont.
Muirhead, A., Toronto, Ont.
*Ramsay, A., & Son, Co., Montreal, Que.
Robertson, The James, Co., Limited, Montreal, Que.
*Scarfe & Co., Brantford, Ont.
Sherwin-Williams Co., The, Montreal, Que.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
Stephens, G. F., & Co., Limited, Winnipeg, Man.

971 Fillet, Leather.

*McLaren, D. K., Limited, Montreal, Que. (Adv. page 1020).
*McLaren, The J. C., Belting Co., Montreal, Que. (Adv. page 1017).

972 FILMS, Photographic.

Canadian Kodak Co., Limited, Toronto, Ont. (Adv. page 1030).

973 FILTER PLANTS.

McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)

974 FILTERS, Water.

*Belleville Pottery Co., Belleville, Ont.
Morrison, The James, Brass Mfg. Co., Limited, Ont. (Adv. page 1029).
Prowse, Geo. R., Montreal, Que.

975 FINDINGS, Boot and Shoe.

See Heels and Heel Stock; Stiffeners and Counters.

976 FINIALS, Metal.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993).
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043).
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009).
*Metal Shingle & Siding Co., Limited, Preston, Ont (Adv. page 999).
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995).
*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039).
*Pedlar Metal Roofing Co., The, Oshawa, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020).
Toronto Hardware Mfg. Co., Toronto, Ont.

977 FINISH, Interior.

See Mills, planing; Fittings, wood, etc.; Mouldings; Blinds.

978 FINISHERS, Brass.

*Cuthbert, W. R., & Co., Montreal, Que.
*Garth Co., The, Montreal, Que.
Mitchell, The Robt., Co., Limited, Montreal, Que.

979 FINISHERS, Cotton.

*Dominion Textile Co., Limited Montreal, Que.
Merchants' Dyeing & Finishing Co., The, Toronto, Ont. (Adv. page 864).

980 FIRE ALARM APPARATUS.

*Northern Electric & Mfg. Co., Limited, The, Montreal, Que. (Adv. page 842).
*Victor Fire Extinguisher Co., The, Toronto, Ont.

981 FIRE APPLIANCES.

Bennett & Wright Co., Limited, The, Toronto, Ont.
*Garth Co., The, Montreal, Que.
McGuire, W. J., Limited, Toronto, Ont. (Adv. page 1039.)
*Seagrave, W. E., Walkerville, Ont.
*Vogel, H. G., Co., Montreal, Que. (Adv. page 1038).
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861).

982 FIRE DEPARTMENT SUPPLIES.

*Canadian Rubber Co. of Montreal, Limited, The, Montreal, Que.
*Garth Co., The, Montreal, Que.
Mitchell, The Robt., Co., Limited, Montreal, Que.
*Seagrave, W. E., Walkerville, Ont.
*Victor Fire Extinguisher Co., The, Toronto, Ont.
*Vogel, H. G., Co., Montreal, Que. (Adv. page 1038).
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861).
*Wilson & Cousins, Toronto, Ont.

983 FIRE ESCAPES.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043).
Hutchison, C. A., & Co., Montreal, Que.
McGregor & McIntyre, Limited, Toronto, Ont.
*Meadows, The Geo. B., Toronto, Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009).
*Parkin Elevator Co., Limited, The Hespeler, Ont.
Reid & Brown, Toronto, Ont.
*Schmidt & Co., Winnipeg, Man.
Shipway Iron, Bell & Wire Mfg. Co., Limited, Toronto, Ont. ..
Watson, John, & Son, Montreal, Que.
*Whitefield, The John, Co., Toronto, Ont.

984 FIREPROOFING, Metal.

Galt Art Metal Co., Limited, The, Galt, Ont. (Adv. page 1034).
Metallic Roofing Co., Limited, Toronto, Ont. (Adv. pages 994 and 995.)

985 FIREPROOFING, Terra Cotta.

Don Valley Brick Works, Toronto, Ont.
Montreal Terra Cotta Lumber Co., The, Montreal, Que.

986 FIREWORKS.

*Hand, T. W., Firework Co., Limited, Hamilton, Ont.
*Holland, The G. A., & Son Co., Montreal, Que.

987 FISH, Boneless.

*Atlantic Fish Companies, Limited, Lunenburg, N.S.

988 FISH, Dried, Salted and Pickled.

*Atlantic Fish Companies, Limited, Lunenburg, N. S.
*B. C. Packers' Association, The, Vancouver, B.C.
*Collas, The C. Robin, Co., Limited, Halifax, N.S.
*Hart, Levi, & Son, Limited, Halifax, N.S.
*Leonard Bros., Montreal, Que.
*Prowse & Sons, Murray Harbor, P.E.I.
*Silver, H. R., Limited, Halifax, N.S.
*Smith, N. M., Halifax, N.S.
*Whitman, Arthur N., Halifax, N.S.

989 FISH, Frozen.

*Atlantic Fish Companies, Limited, Lunenburg, N.S.
*B. C. Packers' Association, The, Vancouver, B.C.
*Leonard Bros., Montreal, Que.

990 FISH (Salmon), Canned.

*Anglo British Columbia Packing Co., Limited, Vancouver, B.C.
*British Columbia Canning Co., Limited, Victoria, B.C.
*B. C. Packers' Association, The, Vancouver, B.C.

991 FISH, Smoked, Salted and Canned.

*Atlantic Fish Companies, Limited, Lunenburg, N.S.
*B. C. Packers' Association, The, Vancouver, B.C.
*Leonard Bros., Montreal, Que.

992 FITTINGS, Automobile and Boat, Brass and Nickel.

*Canadian Brass Mfg. Co., Limited, The, Galt, Ont.
*Chadwick Bros., Hamilton, Ont.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020).
Somerville, Limited, Toronto, Ont. (Adv. Outside Back Cover.)

993 FITTINGS, Bar.

*Blonde Lumber & Mfg. Co., Limited, The, Chatham, Ont.
Brunswick-Balke-Collender Co., The, Toronto, Ont.
Gignac, Beland & Cie, Quebec, Que.
*Hamilton Brass Mfg. Co., Limited, The, Hamilton, Ont.
Hanbury Mfg. Co., The, Brandon, Man.
*Jones Bros. & Co., Limited, Toronto, Ont.
Murray, G. W., Co., Limited, Winnipeg, Man.
*Paquet & Godbout, St. Hyacinthe, Que.
Piggott, J., & Sons, Chatham, Ont.
Winnipeg Paint & Glass Co., Limited, The, Winnipeg, Man.

994 FITTINGS, Bathroom.

Canadian Wolverine Co., Limited, Chatham, Ont.
Carriage Mountings Co., Limited, Niagara Falls, Ont.
*Garth Co., The, Montreal, Que.
Mitchell, The Robt., Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).
Ontario Metal Novelty Mfg. Co., Limited, Toronto, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020).
Toronto Brass Mfg. Co., Toronto, Ont.

995 FITTINGS, Grey Iron.

*Dominion Radiator Co., The, Toronto, Ont.

996 FITTINGS, Metal (Bank, Store and Office).

*Chadwick Bros., Hamilton, Ont.
Clatworthy & Son, Toronto, Ont.
*Eclipse Mfg. Co., Limited, The, Ottawa, Ont.
*Garth Co., The, Montreal, Que.
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009).
*Schmidt & Co., Winnipeg, Man.

997 FITTINGS, Stable (Iron).

Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043).
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999).
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995).
*Ontario Malleable Iron Co., Limited, The, Oshawa, Ont.
*Richardson, C., & Co., St. Mary's Ont. (Adv. page 1063.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020).
*Warden King, Limited, Montreal, Que.

998 FITTINGS, Steam, Gas and Water.

See Brass goods, plumbers' and Steamfitters'.

999 FITTINGS, Wood (Bank, Store and Office).

Anglin, S., & Co., Kingston, Ont.
*Blonde Lumber & Mfg. Co., Limited, The, Chatham, Ont.
*Berlin Interior Hardwood Co., Limited, The, Berlin, Ont.
Burton & Baldwin Mfg. Co., Limited, The, Hamilton, Ont.
Canadian Office & School Furniture Co., Limited, Preston, Ont.
Castle & Son, Montreal, Que.
Chalifour, O., Quebec, Que.
Christie Woodworking Co., Limited, The, St. John, N.B.
Clark, W. H., & Co., Limited, Edmonton, Alta.
Cushing Bros. Co., Limited, Calgary, Alta.
Dempster, James, & Co., Halifax, N.S.
Dominion Office & Store Fitting Co., Limited, London, Ont.
*Eclipse Mfg. Co., Limited, The, Ottawa, Ont.
Elliott, James S., & Son, Prescott, Ont.
Georgian Bay Shook Mills, Limited, Midland, Ont.
Gignac, Beland & Co., Quebec, Que.
Gignac, J. H., Limited, Quebec, Que.
*Globe Furniture Co., Limited, The, Walkerville, Ont. (Adv. page 865).
Gold Medal Furniture Mfg. Co., Limited, Toronto, Ont.
Hadley, The S., Lumber Co., Limited, Chatham, Ont.
Hanbury Mfg. Co., The, Brandon, Man.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
*Jones Bros. & Co., Limited, Toronto, Ont.
Knight Bros. Co., Limited, The, Burk's Falls, Ont.
*Laidlaw, R., Lumber Co., Limited, Toronto, Ont.
*Leigh, James, & Sons, Victoria, B.C.
Lemon, Gonnason & Co., Victoria, B.C.
*Library Bureau of Canada, Limited, Ottawa, Ont. (Adv. page 848).
Long, The Geo., Co., Limited, Sherbrooke, Que.
*Murray & Gregory, Limited, St. John, N.B.
Murray, G. W., Co., Limited, Winnipeg, Man.
Office Specialty Mfg. Co., Limited, Toronto, Ont.
*Paquet & Godbout, St. Hyacinthe, Que.
Patterson-Tilley Co., The, Hamilton, Ont.
Pauze, The U., & Fils Co., Montreal, Que.
Peterboro Canoe Co., Limited, The, Peterboro, Ont.
Piggott, J., & Sons, Chatham, Ont.
Randall, G. H., & Co., Montreal, Que.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Rogers, The Chas., & Sons Co., Limited, Toronto, Ont.
Rutherford, The Wm., & Sons Co., Montreal, Que.
Scott, The J. C., Co., Limited, Toronto, Ont.
Scott, W. W., Co., Montreal, Que.
*Sexton & Co., Limited, Toronto, Ont.
*Smith, John B., & Sons, Limited, Toronto, Ont.
Spencer Bros. & Turner, Limited, Truro, N.S.
Tait & Co., Toronto, Ont.
Traversy, V. E., Montreal, Que.
*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042).
Weiler Bros., Victoria, B.C.
Wilson Bros., Limited, Collingwood, Ont.

1000 FLAGS.

*Bromley & Hague, Limited, Winnipeg, Man.
Copp, Clark Co., Limited, The, Toronto, Ont.
*Dominion Regalia Co., Limited, The, Toronto, Ont.
Edmonton Tent & Mattress Co., Limited, Edmonton, Alta.
*Gidley, H. E., & Co., Penetanguishene, Ont.
*Hague, Armington & Co., Limited, Winnipeg, Man.
*Hand, T. W., Firework Co., Limited, Hamilton, Ont.
Hendry, The Geo. M., Co., Limited, Toronto, Ont.
Leckie, John, Limited, Toronto, Ont.
*Merchants Awning Co., Limited, Montreal, Que.
*Montreal Tent, Awning & Tarpaulin Co., Montreal, Que.
*Sonne, Thos., Sr., Montreal, Que.
*Turner, J. J., & Sons, Peterboro, Ont.
*Woods, Limited, Ottawa, Ont.

1001 FLANNELS.

Bird Woollen Mill Co., Limited, Bracebridge, Ont.
*Brook Woollen Co. of Simcoe, Limited, The, Simcoe, Ont.
Dontigny, Philip, Arnprior, Ont.
Grant, James, Chesley, Ont.
Magog Woollen Mills, Limited, Sherbrooke, Que.
Paris Wincey Mills Co., The, Paris, Ont. (Adv. page 854.)
Penmans, Limited, Paris, Ont. (Adv. page 868.)
Thoburn, Wm., Almonte, Ont.
Willett, S. T., Chambly Canton, Que.
Wylie, James H., Limited, Almonte, Ont.

1002 FLANNELETTES.

*Canadian Colored Cotton Mills Co., Limited, Montreal, Que. (Adv. page 846.)
Cornwall & York Cotton Mills Co., Limited, St. John, N.B.
*Dominion Textile Co., Limited, Montreal, Que.
*Morrice, The D., Co., Limited, Montreal, Que.

1003 FLATWARE, Plated.

Meriden Britannia Co., Limited, Hamilton, Ont.
*Standard Silver Co., Limited, Toronto, Ont.
*Toronto Silver Plate Co., Limited, Toronto, Ont.

1004 FLATWARE, Sterling Silver.

Birks, Henry, & Sons, Limited, Montreal, Que.
*Ellis, P. W., & Co., Limited, Toronto, Ont. (Adv. page 855.)
*Roden Bros., Toronto, Ont. (Adv. page 1048.)
*Toronto Silver Plate Co., Limited, Toronto, Ont.

1005 FLAVORING EXTRACTS.

See Extracts, Flavoring.

1006 FLAX AND FLAX MEAL.

*Western Milling Co., Limited, Calgary, Alta.

1007 FLOATS.

*Jennings, A., & Co., Montreal,

1008 FLOATS, Fish Net.

Canada Spool & Bobbin Co., Limited, Walkerton, Ont.

1009 FLOCK, Upholsterers' and Mattress Makers'.

Bauer, A., & Co., Waterloo, Ont.
Montreal Blanket Co., The, Montreal, Que. (Adv. page 846.)

1010 FLOORING, Malt Kiln.

*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)
*Whitfield, The John, Co., Toronto, Ont.

1011 FLOORING, Marble Mosaic

Hooper's Marble & Granite Co., Limited, Winnipeg, Man.
Luxfer Prism Co., Limited, Toronto, Ont.

1012 FLOORING, Matched Wood

Anglin, S., & Co., Kingston, Ont.
*Blonde Lumber & Mfg. Co., Limited, The, Chatham, Ont.
*Brennen, The M., & Sons Mfg. Co., Hamilton, Ont.
*Brunette Saw Mill Co., Limited, New Westminster, B.C.
*Canada Wood Specialty Co., Limited, The, Orillia, Ont.
*Canadian Pacific Lumber Co., Limited, The, Port Moody, B.C.
Cargill, H., & Son., Cargill, Ont.
Christie Woodworking Co., Limited, The, St. John, N.B.
Dempster, James, & Co., Halifax, N.S.
East Kootenay Lumber Co., Limited, Cranbrook, B.C.
Eaton, J. R., Orillia, Ont.
*Empire Lumber Co., Limited, Toronto, Ont.
Foster, Clement A., Haileybury, Ont.
Georgian Bay Shook Mills, Limited, Midland, Ont.
Gignac, J. H., Limited, Quebec, Que.
*Gravel, The A., Lumber Co., Limited, Etchemin Bridge, Que.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
Heaps, E. H., & Co., Vancouver, B.C. (Adv. page 850.)
Itzweire & Sarrasin, Montreal, Que.
*Keenan Bros., Limited, Owen Sound, Ont.
Knight Bros. Co., Limited, The, Burk's Falls, Ont.
*Laidlaw, R., Lumber Co., Limited, Toronto, Ont.
*Londonderry Iron & Mining Co., Limited, Londonderry, N.S.
*Metis Lumber Co., The, Price, Que.
*Murray & Gregory, Limited, St. John, N.B.
*Paquet & Godbout, St. Hyacinthe, Que.
*Parry Sound Lumber Co., Limited, The, Toronto, Ont. (Adv. page 1038.)
Pauze, The U., & Fils Co., Montreal, Que.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Robinson-McKenzie Lumber Co., Limited, Cranbrook, B.C.
Rutherford, The Wm., & Sons Co., Montreal, Que.
*Seaman, Kent Co., Limited, The, Meaford, Ont.
*Siemon Bros., Limited, Wiarton, Ont.
Spencer Bros. & Turner, Limited, Truro, N.S.
Sprague Lumber Co., Limited, Winnipeg, Man.
Sussex Mfg. Co., Limited, The, Sussex, N.S.
Wilson Bros., Limited, Collingwood, Ont.
Woodstock Lumber & Mfg. Co., Limited, The, Woodstock, Ont.

1013 FLOORING, Parquetry.

*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
Wilson Bros., Limited, Collingwood, Ont.

1014 FLOORING, Rubber.

*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

1015 FLOUR, Buckwheat.

*Brackman-Ker Milling Co., Limited, The, Victoria, B.C. (Adv. (page 1042.)
*Greig, The Robert, Co., Limited, Toronto, Ont.
*McIntosh, P., & Son, Toronto, Ont.
McCann, Knox Milling Co., Limited, Toronto, Ont.
Quance Bros., Delhi, Ont.
*Tillson Co., Limited, The, Tillsonburg, Ont.

1016 FLOUR, Corn.

*Canada Starch Co., Limited, Brantford, Ont.
*McIntosh, P., & Son, Toronto, Ont.
*Quaker Oats Co., The, Peterboro, Ont.

1017 FLOUR, Gluten.

*Greig, The Robert, Co., Limited, Toronto, Ont.

1018 FLOUR, Graham.

*Brackman-Ker Milling Co., Limited, The, Victoria, B.C. (Adv. page 1042).
*Flavelle Milling Co., Limited, The, Lindsay, Ont.
*Goldie, The James, Co., Limited, Guelph, Ont.
*Greig, The Robert, Co., Limited, Toronto, Ont.
*McCann, Knox Milling Co., Limited, Toronto, Ont.
*McIntosh, P., & Son, Toronto, Ont.
*Western Milling Co., Limited, Calgary, Alta.

1019 FLOUR, Malt.

*Canada Malting Co., Limited, The, Toronto, Ont.

1020 FLOUR, Rye.

*Brackman-Ker Milling Co., Limited, The, Victoria, B.C. (Adv. page 1042).
*McCann, Knox Milling Co., Limited, Toronto, Ont.
Quance Bros., Delhi, Ont.

1021 FLOUR, Wheat.

*Campbell Milling Co., Limited, The, West Toronto, Ont.
*Campbell, The John, Co., Limited, St. Thomas, Ont.
Canada Flour Mills Co., Limited, Chatham, Ont.
Cargill, H., & Son, Cargill, Ont.
*Columbia Flouring Mills Co., Limited, Enderby, B.C.
Dominion Millers' Association, Toronto, Ont.
*Edmonton Milling Co., Limited, The, Strathcona, Alta.
*Flavelle Milling Co., Limited, Lindsay, Ont.
*Georgian Bay Milling & Power Co,. Limited, Meaford, Ont.
*Goldie, The James, Co., Limited, Guelph, Ont.
Hunt Bros., Limited, London, Ont.
*Lake of the Woods Milling Co., Limited, Montreal, Que. (Adv. page 853).
*Leitch Bros., Oak Lake, Man.
*McCulloch, Geo., & Sons, Souris, Man.
*McDonald & Robb, Valleyfield, Que.
*McIntosh, P., & Son, Toronto, Ont.
*McLeod Milling Co., Limited, The, Stratford, Ont.
*Noble, Robert, Norval, Ont.
*Ogilvie Flour Mills Co., Limited, The, Montreal, Que.
*Pakeham, C. E., & Son, Norwood, Ont.
Pearce Co., Limited, The, Marmora, Ont.
Pincombe, R. M., Strathroy, Ont.
Quance Bros., Delhi, Ont.
*Seaforth Milling Co., Seaforth, Ont.
*Shaw, The Hedley, Milling Co., Limited, Toronto, Ont.
Taylor, The T. H., Co., Limited, Chatham, Ont.
*Tillson Co., Limited, The, Tillsonburg, Ont.
*Western Canada Flour Mills Co., Limited, Toronto, Ont.
*Western Milling Co., Limited, Calgary, Alta.

1022 FLOUR, Whole Wheat.

*Brackman-Ker Milling Co., Limited, The, Victoria, B.C. (Adv. page 1042).
*Greig, The Robert, Co., Limited, Toronto, Ont.
*McDonald & Robb, Valleyfield, Que.
*Western Milling Co., Limited, Calgary, Alta.

1023 FLOWERS, Artificial.

Dominion Flower & Feather Mfg. Co., The, Montreal, Que.

1024 FLUIDS, Embalming.

*Globe Casket Co., The, London, Ont.

1025 FLUMES, Water, Iron and Steel.

Madison Williams Mfg. Co., Limited, The, Lindsay, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862).

1026 FONTS, Church Baptismal.

*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042).

1027 FOOD, Animal, Stock and Poultry.

Beaver Mfg. Co., Limited, Galt, Ont.
*Cottam Bird Seed, London, Ont.
*Greig, The Robert Co., Limited, Toronto, Ont.
*Harris Abattoir Co., Limited, The Toronto, Ont.
*International Stock Food Co., Toronto, Ont.
Wallaceburg Sugar Co., Limited, The, Wallaceburg, Ont.

1028 FOODS, Bird.

*Cottam Bird Seed, London, Ont.
Nickolson & Brock, Toronto, Ont.

1029 FOODS, Breakfast.

See Cereals.

1030 FOOTBALLS.

Sale, The Julian, Leather Goods Co., Limited, Toronto, Ont.
*Western Leather Goods Co., Limited, The, Toronto, Ont.

1031 FORGES, Portable and Stationary.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993).
Canadian Buffalo Forge Co., Limited, Montreal, Que.
London Foundry Co., Limited, The, London, Ont.
McLeod, Hawthorne Co., Limited, Montreal, Que.
Sheldons, Limited, Galt, Ont. (Adv. page 859).

1032 FORGINGS, Car.

*Canada Car Co., Limited, Montreal, Que.
*Canada Forge Co., Limited, Welland, Ont. (Adv. page 1027).
Crossen Car Mfg. Co., of Cobourg, Limited, The, Cobourg, Ont.
Hamilton Steel & Iron Co., Limited, The, Hamilton, Ont. (Adv. page 1029).
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041).
Rhodes, Curry & Co., Limited, Amherst, N.S.

1033 FORGINGS, Drop.

*Canadian Billings & Spencer, Limited, Welland, Ont. (Adv. page 1031).
Hamilton Steel & Iron Co., Limited, The, Hamilton, Ont. (Adv. page 1029).
*McFarlane-Neill Mfg. Co., Limited, St. Mary's, N.B.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)
*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

1034 FORGINGS, Iron.

*Canada Forge Co., Limited, Welland, Ont. (Adv. page 1027).
Crossen Car Mfg. Co., of Cobourg, Limited, The, Cobourg, Ont.
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843).
Hamilton Steel & Iron Co., Limited, The, Hamilton, Ont. (Adv. page 1029).
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041).
*Montreal Steel Works, Limited, Montreal, Que.
Norsworthy, C., & Co., St. Thomas, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Watson, John, & Son, Montreal, Que.
White, R. C., Montreal, Que.

1035 FORGINGS, Steel.

*Canada Forge Co., Limited, Welland, Ont. (Adv. page 1027).
*Collingwood Shipbuilding Co., Limited, Collingwood, Ont.
Hamilton Steel & Iron Co., Limited, The, Hamilton, Ont. (Adv. page 1029).
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862).
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041).
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041).
Morrow, The John, Screw, Limited, Ingersoll, Ont.
Nova Scotia Steel & Coal Co., Limited, New Glasgow, N.S. (Adv. page 870).

1036 FORKS, Hand.

*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852).
*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
Bedford Mfg. Co., The, Bedford, Que.
*Welland Vale Mfg. Co., Limited, The, St. Catharines, Ont. (Adv. page 1040).

1037 FOUNDERS, Brass.

Beauport, La Cie, Brasserie de, Quebec, Que.
Booth Copper Co., Limited, The, Toronto, Ont.
*Chadwick Bros., Hamilton, Ont.
*Coulter, Wm., & Sons, Toronto, Ont.

*Cuthbert, W. R., & Co., Montreal, Que.
Empire Mfg. Co., Limited, The, London, Ont.
*Garth Co., The, Montreal, Que.
*Hamilton Brass Mfg. Co., Limited, Hamilton, Ont.
Hughes, J. W., & Son, Montreal, Que.
*Keith & Fitzsimons Co., Toronto, Ont.
*Kerr Engine Co., Limited, The, Walkerville, Ont. (Adv. page 1033).
Lumen Bearing Co., West Toronto, Ont. (Adv. page 1031.)
*McAvity, T., & Sons, St. John, N.B.
Mitchell, The Robert, Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).
*New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
*Owen Sound, Iron Works Co., Limited, The, Owen Sound, Ont.
Robertson, The James, Co., Limited, Montreal, Que.
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
*Skinner Co., Limited, The, Gananoque, Ont.
*Tallman, J. N., & Sons, Hamilton,
Taylor-Forbes Co., Limited, Guelph, Ont.
Toronto Brass Mfg. Co., Toronto, Ont.
*Wilson & Cousins, Toronto, Ont. Ont.
Windsor Foundry & Machine Co., Limited, Windsor, N.S.

1038 FOUNDERS, Iron.

See Castings, etc.

1039 FOUNDRY EQUIPMENT.

Hamilton Facing Mill Co., Limited, Hamilton, Ont.

1040 FOUNTAINS, Soda.

*Chadwick Bros., Hamilton Ont.
Fletcher Mfg. Co., Limited, Galt, Ont.
*McLaughlin, J. J., Limited, Toronto, Ont.
Macnab & Roberts, Limited, Winnipeg, Man.

1041 FRAMES, Furniture.

See Furniture.

1042 Frames, Hat.

Walker, E. C., & Sons, Toronto, Ont.

1043 FRAMES, Manhole.

See Castings, manhole.

1044 FRAMES, Picture.

See Mouldings, Picture.

1045 FRAMES, Spring Bed.

Ackland, D., & Son, Limited, Winnipeg, Man.
*Canada Wood Specialty Co., Limited, The, Orillia, Ont.
*Dominion Furniture Mfg. Co., Limited, The, St. Therese, Que.

1046 FRAMES, Window (metal).

See Building Material, Sheet Metal and Windows, Fireproof.

1047 Frames, Window and Door (Wood).

See Mills, Planing.

1048 FREEZERS, Ice Cream.

*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031).
Fletcher Mfg. Co., Limited, Toronto, Ont.
Kemp Mfg. Co., Toronto, Ont.

1049 FRETWORK, Moorish.

Otterville Mfg. Co., Limited, Otterville, Ont.
*Schultz Bros. Co., Limited, The, Brantford, Ont.

1050 FRIEZE.

See Cloth, Frieze.

1051 FRILLINGS, Ruchings and Veilings.

*Fairbairn, Rhys D., Limited, Toronto, Ont.
*Ladies' Wear, Limited, Toronto, Ont.
*Rea, A. E., & Co., Limited, Toronto, Ont.
Reid, The A. T., Co., Limited, Toronto, Ont.

1052 FROGS, Railway.

*Canadian Ramapo Iron Works, Limited, Niagara Falls, Ont. (Adv. page 1021.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862)
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041).
Vulcan Iron Works, Limited, The, Winnipeg, Man.

1053 FRUIT, Canned.

Bloomfield Packing Co., Limited, Bloomfield, Ont.
*Burlington Canning Co., Limited, The, Burlington, Ont.
*Canadian Canners, Limited, Hamilton, Ont.
*Graham Co., Limited, The, Belleville, Ont.
Old Homestead Canning Co., The, Picton, Ont.
*Robinson, O. E., & Co., Ingersoll, Ont.
*Smith, E. D., Winona, Ont.
*Wethey, J. H., Limited, St. Catharines, Ont.

1054 FRUIT, Evaporated.

*Biggs Fruit & Produce Co., Limited, Burlington, Ont.
*Canadian Canners, Limited, Hamilton, Ont.
*Graham Co., Limited, The, Belleville, Ont.
*Port Dover Evaporating Co., The, Port Dover, Ont.
*Robinson, O. E., & Co., Ingersoll, Ont.

1055 FRUITS, Fresh.

*Biggs Fruit & Produce Co., Limited, Burlington, Ont.
*Burlington Canning Co., Limited, Burlington, Ont.
*Graham Co., Limited, The Belleville, Ont.
*Niles, W. P., Wellington, Ont.
*Robinson, O. E., & Co., Ingersoll, Ont.
*Smith, E. D., Winona, Ont.

1056 FULLING MILLS.

*Karch, H. W., Hespeler, Ont.

1057 FUNNELS, Ship.

Canada Fundry Co., Limited, Toronto, Ont. (Adv. page 993).
*Polson Iron Works, Limited, Toronto, Ont. (Adv. page 1033).

1058 FURNACES, Automatic, Smokeless.

*Murphy Iron Works, Toronto, Ont.

1059 FURNACES, Candy.

Fletcher Mfg. Co., Limited, Toronto, Ont.
Gardner, Robt., & Son, Montreal, Que. (Adv. page 1043.)

1060 FURNACES, Cupola Blast.

Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827).
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862).

1061 FURNACES, Gas Tempering.

*Siche Gas Co., Limited, The, Toronto, Ont.

1062 FURANCES, Hot Air.

*Amherst Foundry Co., Limited, Amherst, N.S. (Adv. page 849)
Buck, The Wm. Stove Co., Limited, Brantford, Ont.
Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015).
*Clare Bros. & Co., Limited, Preston, Ont.
Copp, W. J., Son & Co., Fort William, Ont.
Doherty Mfg. Co., Limited, Sarnia, Ont.
Guelph Stove Co., Limited, Guelph, Ont.
*Gurney Foundry Co., Limited, The, Toronto, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Hillis & Sons, Limited, Halifax, N.S.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022).
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019).
*Moore, The D., Co., Limited, Hamilton, Ont.
*Pease Foundry Co., Limited, Toronto, Ont.
*Pease-Waldon Co., Limited, Winnipeg, Man.
Record Foundry & Machine Co., Moncton, N.B.
*Shantz, I. E., & Co., Berlin, Ont.
Shaw & Mason, Limited, Sydney, N.S.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020).
Star Iron Co., Limited, Montreal, Que.
Stewart, The James, Mfg. Co., Limited, Woodstock, Ont.
Tilden, Gurney & Co., Limited, Winnipeg, Man.
Toronto Furnace & Crematory Co., Limited, Toronto, Ont.
Walker Steel Range Co., Limited, Grimsby, Ont.
Western Foundry Co., Limited, The, Wingham, Ont.
Wheeler & Bain, Toronto, Ont.
Windsor Foundry & Machine Co., Limited, Windsor, N.S.

1063 FURNACES, Smelting.

Alexander Fleck, Limited, Ottawa, Ont.
Canada Foundry Co., Limited, Toronto, Ont.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862)

1064 FURNITURE, Art.

Gendron Mfg. Co., Limited, The Toronto, Ont. (Adv. page 853).
*Hurndall Novelty Furniture Co., Limited, Orangeville, Ont.
Rogers, The Chas., & Sons Co., Limited, Toronto, Ont.
Scott, W. W., Co., Montreal, Que.

1065 FURNITURE, Bedroom.

Ball Furniture Co., Limited, The, Hanover, Ont.
Bell Furniture Co., Limited, The, Southampton, Ont.
Berlin Furniture Co., Limited, The, Berlin, Ont.
*Coombe & Watson, Kincardine, Ont.
*Crown Furniture Co., Limited, The, Preston, Ont.
*Dominion Furniture Mfg. Co., Limited, The, St. Therese, Que.
Gibbard Furniture Co. of Napanee, Limited, The, Napanee, Ont.
Hespeler Furniture Co., Limited, The, Hespeler, Ont.
Kensington Furniture Co., Limited, The, Goderich, Ont.
*Knechtel Furniture Co., Limited, The, Hanover, Ont.
Listowel Furniture Co., Limited, The, Listowel, Ont.
*Lucknow Furniture Co., The, Lucknow, Ont.
*Malcolm, The Andrew, Furniture Co., Limited, Kincardine, Ont.
*Malcolm & Souter Furniture Co., Limited, Hamilton, Ont.
Meaford Mfg. Co., Limited, The, Meaford, Ont.
*North American Bent Chair Co., Limited, The, Owen Sound, Ont. (Adv. page 1030).
*Oliver, J., & Sons, Limited, Ottawa, Ont.
Rogers, The Chas., & Sons Co., Limited, Toronto, Ont.
Scott, W. W., Co., Montreal, Que.
Stratford Chair Co., Limited, Stratford, Ont.
Valiquette, N. G., Limited, Montreal, Que.
Weiler Bros., Victoria, B.C.
World Furnishing Co., Limited, The, Orillia, Ont.

1066 FURNITURE, Camp.

*Peterboro Canoe Co., Limited, The, Peterboro, Ont.

1067 FURNITURE, Church.

*Canadian Office & School Furniture Co., Limited, The, Preston, Ont.
*Globe Furniture Co., Limited, The, Walkerville, Ont. (Adv. page 865).
*Paquet & Godbout, St. Hyacinthe, Que.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Scott, W. W., Co., Montreal, Que.
*Snider, J. B., Waterloo, Ont.
*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042).
Wilson Bros., Limited, Collingwood, Ont.

1068 FURNITURE, Household.

Baird Bros., Plattsville, Ont.
Bell Furniture Co., Limited, The, Southampton, Ont.
Berlin Furniture Co., Limited, The, Berlin, Ont.
Brander, Morris & Co., Halifax, N.S.
*Canada Furniture Manufacturers, Limited, Toronto, Ont.
Cline, Jas. A., Limited, Stratford, Ont.
*Dominion Furniture Mfg. Co., Limited, The, St. Therese, Que.
Ellis Furniture Co., The Ingersoll, Ont.
Gibbard Furniture Co., of Napanee, Limited, The, Napanee, Ont.
*Hay & Co., Woodstock, Ont.
Hespeler Furniture Co., Limited, Hespeler, Ont.
*Hibner, The D., Furniture Co., Limited, Berlin, Ont.
Kensington Furniture Co., Limited, The, Goderich, Ont.
*Knechtel Furniture Co., Limited, The, Hanover, Ont.
*Krug, The H., Furniture Co., Limited, Berlin, Ont.
Listowel Furniture Co., Limited, The, Listowel, Ont.
*Lucknow Furniture Co., The, Lucknow, Ont.
McLagan, The George, Furniture Co., Limited, Stratford, Ont.
*Malcolm, The Andrew, Furniture Co., Limited, Kincardine, Ont.
*Malcolm & Souter Furniture Co., Limited, Hamilton, Ont.
Meaford Mfg. Co., Limited, The, Meaford, Ont.
Mundell, John C., & Co., Elora, Ont.
*North American Bent Chair Co., Limited, The, Owen Sound, Ont. (Adv. page 1030).
*Oliver, J., & Sons, Limited, Ottawa, Ont.
*Paquet & Godbout, St. Hyacinthe, Que.
Rogers, The Chas., & Sons Co., Limited, Toronto, Ont.
Scott, W. W., Co., Montreal, Que.
Strathroy Furniture Co., Limited, The, Strathroy, Ont.
Stratford Chair Co., Limited, Stratford, Ont.
Valiquette, N. G., Limited, Montreal, Que.
Weiler Bros., Victoria, B.C.
World Furnishing Co., Limited, The, Orillia, Ont.

1069 FURNITURE, Metallic for Vaults, etc.

*Eclipse Mfg. Co., Limited, The, Otawa, Ont.
Office Specialty Mfg. Co., Limited, The, Toronto, Ont.

1070 FURNITURE, Office.

*Berlin Interior Hardwood Co., Limited, The, Berlin, Ont.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
*Canadian Office & School Furniture Co., Limited, The, Preston, Ont.
*Coombe & Watson, Kincardine, Ont.
*Eclipse Mfg. Co., Limited, The, Ottawa, Ont.
*Globe-Wernicke Co., Limited, The, Stratford, Ont.
*Krug, The H., Furniture Co., Limited, Berlin, Ont.
*Library Bureau of Canada, Limited, Ottawa, Ont. (Adv. page 848.)
*North American Bent Chair Co., Limited, The, Owen Sound, Ont. (Adv. page 1030.)
Office Specialty Mfg. Co., Limited, Toronto, Ont.
*Paquet & Godbout, St. Hyacinthe, Que.
*Preston Furniture Co., Limited, Preston, Ont.

Rogers, The Chas., & Sons Co., Limited, Toronto, Ont.
Scott, W. W., Co., Montreal, Que.
*Snider, J. B., Waterloo, Ont.
Valiquette, N. G., Limited, Montreal, Que.
Weiler Bros., Victoria, B.C.

1071 FURNITURE, Parlor.

Cline, Jas. A., Limited, Stratford, Ont.
*Coombe & Watson, Kincardine, Ont.
Dymond, The W. P., Co., Limited, Strathroy, Ont.
Ellis Furniture Co., The, Ingersoll, Ont.
*Elmira Upholstering Co., Limited, The, Elmira, Ont.
Gold Medal Furniture Mfg. Co., The, Toronto, Ont.
Hespeler Furniture Co., Limited, The, Hespeler, Ont.
*Hibner, The D., Furniture Co., Limited, Berlin, Ont.
*Knechtel Furniture Co., Limited, The, Hanover, Ont.
*Krug, The H., Furniture Co., Limited, Berlin, Ont.
Lippert & Co., Berlin, Ont.
McLagan, The George, Furniture Co., Limited, Stratford, Ont.
*Malcolm & Souter Furniture Co., Limited, Hamilton, Ont.
Mundell, John C., & Co., Elora, Ont.
*North American Bent Chair Co., Limited, The, Owen Sound, Ont. (Adv. page 1030.)
Rogers, The Chas., & Sons Co., Limited, Toronto, Ont.
Scott, W. W., Co., Montreal, Que.
Snyder Bros. Upholstering Co., Limited, Waterloo, Ont.
Tombyll Upholstering & Frame Mfg. Co., Limited, The, Montreal, Que.
Valiquette, N. G., Limited, Montreal, Que.
*Waterloo Furniture Co., Limited, The, Waterloo, Ont.
Weiler Bros., Victoria, B.C.

1072 FURNITURE, Reed and Rattan.

*Canada Furniture Mfrs., Limited, Toronto, Ont.
Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)
Imperial Rattan Co., Limited, Walkerville, Ont. (Adv. page 1034.)
Smith, J. E., & Co., Truro, N.S.

1073 FURNITURE, Sanitary.

See Seats, Closet.

1074 FURNITURE, School and Lodge Room.

*Canadian Office & School Furniture Co., Limited, The, Preston, Ont.
*Globe Furniture Co., Limited, The, Walkerville, Ont. (Adv. page 865.)
*North American Bent Chair Co., Limited, The, Owen Sound, Ont. (Adv. page 1030.)
*Paquet & Godbout, St. Hyacinthe, Que.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Scott, W. W., Co., Montreal, Que.
Smart, The, James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
*Snider, J. B., Waterloo, Ont.
*Valley City Seating Co., Limited, The, Dundas, Ont.
Vilas, W. F., Cowansville, Que. (Adv. page 1042.)
Wilson Bros., Limited, Collingwood, Ont.

1075 FURNITURE, Upholstered.

B. C. Bedding & Upholstery Co., Limited, Vancouver, B.C.
Castle & Son, Montreal, Que.
Cline, Jas. A., Limited, Stratford Ont.
Dymond, The W. P., Co., Limited, Strathroy, Ont.
Ellis Furniture Co., The, Ingersoll, Ont.
*Elmira Upholstering Co., Limited, The, Elmira, Ont.
Gold Medal Furniture Mfg. Co., Limited, Toronto, Ont.
*Hurndall Novelty Furniture Co., Limited, Orangeville, Ont.
Leslie, John, Winnipeg, Man.
Lippert & Co., Berlin, Ont.
Mundell, John C., & Co., Elora, Ont.
Ross, The C., Co., Limited, Ottawa, Ont.
Snyder Bros. Upholstering Co., Limited, Waterloo, Ont.
Tombyll Upholstering & Frame Mfg. Co., Limited, The, Montreal, Que.
Valiquette, N. G., Limited, Montreal, Que.
*Waterloo Furniture Co., Limited, The, Waterloo, Ont.
Wilder, H. A., & Co., Montreal, Que.

1076 FURS.

Allan, A. A., & Co., Toronto, Ont.
Barrie, Thos., & Co., Peterboro, Ont.
Boulter, Waugh & Co., Limited, Montreal, Que.
Bourdeau, J., & Son, Montreal, Que.
*Brereton & Manning, Toronto, Ont.
Brown, W. N., Winnipeg, Man.
*Carter, E. T., & Co., Toronto, Ont.
Dechene & Paulin, Quebec, Que.
Dunlap Cooke Co. of Canada, Limited, The, Amherst, N.S.
Eaton, The T., Co., Limited, Toronto, Ont.
Excelsior Fur Dressing & Dyeing Works, Montreal, Que.
*Fairweather, J. W. T., & Co., Toronto, Ont.
*Forsythe, Morrison & Co., Limited, London, Ont.
Galibert, F., Montreal, Que.
*Glassco, G. F., & Co., Hamilton, Ont.
*Hammond, W. J., Winnipeg, Man.
*Holt, Renfrew & Co., Quebec, Que.
*Laliberte, J. B., Quebec, Que.
*Knox Mfg. Co., Toronto, Ont.
Orr, Wm. E., & Co., Toronto, Ont.
Paquet Co., Limited, The, Quebec, Que.
*Peck, John W., & Co., Limited, Montreal, Que. (Adv. page 837.)
Schnaufer, F., Montreal, Que. (Adv. page 834.)
Simpson, The Robert Co., Limited, Toronto, Ont.
Swift, Copland & Co., Limited, Montreal, Que.
Waldron, Drouin Co., Limited, The, Montreal, Que.
Winnipeg Fur Co., The, Winnipeg, Man.

1077 FUSES, Electric.

Dominion Electrical Works, Limited, Halifax, N.S.
*Hamilton Powder Co., Montreal, Que.
*Pringle, The R. E. T., Co., Limited, Montreal, Que.

G

1078 GALLOONS.

Cascade Narrow Fabric Co., Coaticook, Que.

1079 GALVANIZERS.

Canada Metal Co., Limited, The, Toronto, Ont. (Adv. page 869.)
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
*Goold, Shapley & Muir Co., Limited, Brantford, Ont.
*Kemp Mfg. & Metal Co., Limited, The, Winnipeg, Man.
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., London, Ont. (Adv. page 1022.)
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)

1080 GAMES.

Copp, Clark Co., Limited, The, Toronto, Ont.
*Holland, The G. A., & Son Co., Montreal, Que.
*Taylor, Scott & Co., Toronto, Ont.

1081 GARMENTS, Eiderdown.

*Galt Knitting Co., Limited, Galt, Ont. (Adv. page 1042.)

1082 GARMENTS, FUR LINED.

See Furs.

1083 GARTERS.

*Berlin Suspender & Button Co., Limited, The, Berlin, Ont.
Hall, The James, Co., Brockville, Ont.

1084 GAS, Acetylene.

Bradford Gas Co., Limited, Toronto, Ont.

1085 GAS, Carbonic Acid.

Canadian Carbonate Co., Cote St. Paul, Montreal, Que.
Toronto Liquid Carbonate Co., Limited, Toronto, Ont.

1086 GAS FIXTURES.

Bennett & Wright Co., Limited, The, Toronto, Ont.
Farquhar Bros., Halifax, N.S.
*Garth Co., The, Montreal, Que.
*Jenking Brass Mfg. Co., Limited, Montreal, Que.
*Keith & Fitzsimons Co., Limited, The, Toronto, Ont.
McGuire, W. J., Limited, Toronto, Ont. (Adv. page 1039.)
Mitchell, The Robert Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Standard Brass Mfg. Co., Limited, Sarnia, Ont.

1087 GASKETS.

*Canadian Asbestos Co., Montreal, Que.
*Garlock Packing Co., The, Hamilton, Ont.
Hamilton Engine Packing Co., Hamilton, Ont.
Wing, J. T., & Co., Windsor, Ont.

1088 GASKETS, Rubber.

*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)
Durham Rubber Co., Limited, The, Bowmanville, Ont. (Adv. page 844.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

1089 GASOLINE.

*British-American Oil Co., Limited, The, Toronto, Ont.
Canadian Oil Co., Limited, Toronto, Ont.
Imperial Oil Co., Limited, The, Montreal, Que.
Queen City Oil Co., Limited, The, Toronto, Ont. (Adv. page 1028.)

1090 GATES, Steel.

Frost Wire Fence Co., Limited, Hamilton, Ont.
Owen Sound Wire Fence Co., Limited, Owen Sound, Ont.

1091 GATES, Street and Railway.

*London Fence Machine Co., Limited, London, Ont.
*McGregor Banwell Fence Co., Limited, The, Walkerville, Ont. (Adv. page 1037.)
Manitoba Anchor Wire Fence Co., Limited, The, Winnipeg, Man.
Piper, The Hiram L., Co., Limited, Montreal, Que.
*Piper, The N. L., Railway Supply Co., Limited, Toronto, Ont.

1092 GATES, Wrought Iron and Wire.

Anthony Wire Fence Co., Limited, The, Walkerville, Ont. (Adv. page 1030.)
Banwell Hoxie Wire Fence Co., Limited, The, Hamilton, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)
Frost Wire Fence Co., Limited, Hamilton, Ont.
*Great West Wire Fence Co., Limited, The, Winnipeg, Man.
*London Fence Machine Co., Limited, London, Ont.
*McGregor Banwell Fence Co., Limited, The, Walkerville, Ont. (Adv. page 1037.)
Manitoba Anchor Wire Fence Co., Limited, The, Winnipeg, Man.
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)
New Brunswick Fence Co., Limited, The, Moncton, N.B.
Owen Sound Wire Fence Co., Limited, Owen Sound, Ont.
*Page Wire Fence Co., Limited, The, Walkerville, Ont.
Shipway Iron, Bell & Wire Mfg. Co., Limited, Toronto, Ont.
Western Iron Works, Limited, Winnipeg, Man.

1093 GAUGES, Ammonia.

Morrison, The James, Brass Mfg. Co. Limited, Toronto, Ont. (Adv. page 1029).

1094 GAUGES, Railway Track.

*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041).

1095 GAUGES, Test.

*Sutherland Rifle Sight Co., Limited, The, New Glasgow, N.S.

1096 GAUGES, Vacuum, Water and Steam.

*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851).
*Garth Co., The, Deseronto, Ont.
Mitchell, The Robert, Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Penberthy Injector Co., Limited, Windsor, Ont. (Adv. page 865).

1097 GEARING, Cast Iron.

Augustin & Daudelin, St. Hyacinthe, Que.
*Dodge Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. page 831).
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833).
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que, (Adv. page 1041.)
Robertson Machinery Co., Limited, The, Welland, Ont.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
*Wilson, J. C., & Co., Glenora, Ont.

1098 GEARING, Machine Cut and Dressed.

Augustin & Daudelin, St. Hyacinthe, Que.
*Ballantine, John, & Co., Limited, Preston, Ont.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828).
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993)
*Dodge Mfg. Co. of Toronto, Limited, Toronto, Ont. (Adv. page 831).
*Drolet, F. X., Quebec, Que.
Fleck, Alexander, Limited, Ottawa, Ont.
Gardner, Robt., & Son., Montreal, Que. (Adv. page 1043.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833).
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Kennedy, The Wm., & Sons, Limited, Owen Sound, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)

Miller Bros. & Toms, Montreal, Que. (Adv. page 1041).
Oxford Foundry & Machine Co., Oxford, N.S.
Schofield-Holden Machine Co., Limited, Toronto, Ont.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
*Stevens Co., of Galt, Limited, The Galt, Ont. (Adv. page 1003).
*Wilson, J. C., & Co., Glenora, Ont.

1099 GEARS, Steamboat and Vessel (Steering).

*Letson & Burpee, Limited, Vancouver, B.C.
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.

1100 GEARS, Wagon and Carriage.

*Armstrong, The J. B., Mfg. Co., Limited, Guelph, Ont. (Adv. page 996)
Conboy Carriage Co., Limited, The, Toronto, Ont.
Granby Carriage Co., The, Granby, Que.
*Guelph Carriage Top Co., Guelph, Ont.
Hore, F. W., & Son, Limited, Hamilton, Ont.
*McLaughlin Carriage Co., Limited, Oshawa, Ont.

1101 GELATINE.

*Canada Glue Co., Limited, Brantford, Ont.
Giant Powder Co., Con., The, Victoria, B.C.
McLarens, Limited, Hamilton, Ont.
Ontario Powder Co., Limited, Kingston, Ont.

1102 GENERATORS, Acetylene Gas.

*Commercial Acetylene Co. of New York, Toronto, Ont.
*Keith & Fitzsimons Co., Limited, The, Toronto, Ont.
Piper, The Hiram L., Co., Limited, Montreal, Que.
*Shawinigan Carbide Co., Limited, The, Montreal, Que (Adv. page 832).

1103 GENERATORS, Electric.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
Canadian General Electric Co., Limited, Toronto, Ont.
Canadian Westinghouse Co., Limited, Hamilton, Ont.
Consolidated Electric Co., Limited, Toronto, Ont.
Eastman Machine Co., Limited, The, Toronto, Ont.
Hinton Electric Co., Limited, The, Vancouver, B.C.
McDougall, The, John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)

1104 GENERATORS, Siche Gas.

*Siche Gas Co., Limited, The, Toronto, Ont.

1105 GIN.

Boivin, Wilson & Co., Montreal, Que.
Hirsch, J., & Sons, Limited, Montreal, Que.

1106 GIRDERS, Iron and Steel.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Bridge Co., Limited, The, Walkerville, Ont. (Adv. page 1044).
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843).
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827).
Stratford Bridge & Iron Works Co., Stratford, Ont.

1107 GIRDLES, Fancy (Wool, Cotton, Etc.)

*Peters, J. Henry, Co., Toronto, Ont.
Textile Trimmings Co., The, Toronto, Ont.

1108 GLASS, Art and Prismatic.

Hobbs Mfg. Co., Limited, The, London, Ont.
Hughes & Co., Toronto, Ont.
Luxfer Prism Co., Limited, Toronto, Ont.
Maritime Art Glass Works, Limited, St. John, N.B.
Reardon, Frank, Halifax, N.S.
Roche, David, Halifax, N.S.
Toronto Plate Glass Importing Co., Limited, The, Toronto, Ont.

1109 GLASS, Bevelled and Silvered.

*Dominion Stained Glass Co., Toronto, Ont.
Hughes & Co., Toronto, Ont.
Maritime Art Glass Works, Limited, St. John, N.B.
*Phillips Mfg. Co., Limited, Toronto, Ont. (Adv. page 1000).
Sharpe, C. A., Montreal, Que.
Toronto Plate Glass Importing Co., Limited, The, Toronto, Ont.
Winnipeg Paint & Glass Co., Limited, The, Winnipeg, Man.

1110 GLASS, Bevelled and Stained.

*Dominion Stained Glass Co., Toronto, Ont.
Hughes & Co., Toronto, Ont.
Maritime Art Glass Works, Limited, St. John, N.B.
Queen City Plate Glass & Mirror Co., Limited, The, Toronto, Ont.
Ramsay, A. Frank, & Co., Montreal, Que. (Adv. page 845).
Toronto Plate Glass Importing Co., Limited, The, Toronto, Ont.

1111 GLASS, Chipped (Ornamental and Plain).

*Dominion Stained Glass Co., Toronto, Ont.
Hobbs Mfg. Co., Limited, The, London, Ont.
Queen City Plate Glass & Mirror Co., Limited, The, Toronto, Ont.
Winnipeg Paint & Glass Co., Limited, The, Winnipeg, Man.

1112 GLASS, Fireproof.

See Building Material, sheet metal.

1113 GLASS, Ground.

Hobbs Mfg. Co., Limited, The, London, Ont.

1114 GLASS, Leaded.

Castle & Son, Montreal, Que.
Hobbs Mfg. Co., Limited, The, London, Ont.
Queen City Plate Glass & Mirror Co., Limited, The, Toronto, Ont.
Ramsay, A. Frank, & Co., Montreal, Que. (Adv. page 845.)
Roche, David, Halifax, N.S.
Winnipeg Paint & Glass Co., Limited, The, Winnipeg, Man.

1115 GLASS, Plate and Window.

*Dominion Stained Glass Co., Toronto, Ont.
*Pilkington Bros., Limited, Montreal, Que.
Ramsay, A. Frank, & Co., Montreal, Que. (Adv. page 845.)
Sharpe, C. A., Montreal, Que.
Toronto Plate Glass Importing Co., Limited, The, Toronto, Ont.

1116 GLASS, Sand Cut, Enameled and Embossed.

*Dominion Stained Glass Co., Toronto, Ont.
Hobbs Mfg. Co., Limited, The, London, Ont.
Maritime Art Glass Works, Limited, St. John, N.B.
Queen City Plate Glass & Mirror Co., Limited, The, Toronto, Ont.
Winnipeg Paint & Glass Co., Limited, The, Winnipeg, Man.

1117 GLASSWARE, Cut.

*Gowans, Kent & Co., Limited, Toronto, Ont.
*Gundy-Clapperton Co., Limited, Toronto, Ont.
*Roden Bros., Toronto, Ont.

1118 GLASSWARE, Flint, Amber and Green.

Diamond Flint Glass Co., Limited, Montreal, Que.
Sydenham Glass Co., Limited, The, Wallaceburg, Ont.

1119 Globes, Lantern.

Diamond Flint Glass Co., Limited, Montreal, Que.
*Humphreys Glass Co., Limited, Trenton, N.S.
Sydenham Glass Co. of Wallaceburg, Limited, The, Wallaceburg, Ont.

1120 GLOBES, School.

Hendry, The Geo. M., Co., Limited, Montreal, Que.

1121 GLOVES, Boxing.

Sale, The Julian, Leather Goods Co., Limited, Toronto, Ont.

1122 GLOVES, Canvas, Leather Faced.

Storey, W. H., & Sons, Limited, Acton, Ont.

1123 GLOVES, Fur.

*Brereton & Manning, Toronto, Ont.
Paquet Co., Limited, The, Quebec, Que.

1124 GLOVES, Leather and Kid.

*Clarke, A. R., & Co., Limited, Toronto, Ont.
*Galibert, F., Montreal, Que.
*Hudson Bay Knitting Co., The, Montreal, Que.
*Laliberte, J. B., Quebec, Que.
Paquet Co., Limited, The, Quebec, Que.
*Ross, Henry, Indian Lorette, Que.
Storey, W. H., & Son, Limited, Acton, Ont.

1125 GLOVES, Rubber.

*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)

1126 GLOVES, Silk.

*Corticelli Silk Co., Limited, Montreal, Que.

1127 GLOVES, Woollen.

Ballantyne, R. M., Limited, Stratford, Ont.
Hall, The James, Co., Brockville, Ont.

1128 GLUCOSE.

*Edwardsburg Starch Co., Limited, Montreal, Que.
St. Lawrence Starch Co., Limited, Port Credit, Ont.

1129 GLUE.

Berlin Glue Works, The, Berlin, Ont.
*Canada Glue Co., Limited, Brantford, Ont.
Delany & Pettit Co., Limited, The, Toronto, Ont. (Adv. page 1037).
*Gilmour Bros. & Co., Montreal, Que.
Harris, W., & Co., Toronto, Ont.
Jamieson, R. C., & Co., Limited, Montreal, Que.
Marquis, F. Canac, Quebec, Que.
*Martin, The D. B., Co., Limited, Toronto Junction, Ont.

1130 GLYCERINE.

Cowan, John, Co., Limited, Montreal, Que.
Lever Bros., Limited, Toronto, Ont.
Morton, David, & Sons, Limited, Toronto, Ont.
Pugsley, Dingman & Co., Limited, Toronto, Ont.

1131 GO-CARTS.

Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853)
Imperial Rattan Co., Limited, Walkerville, Ont. (Adv. page 1034.)

1132 GOLD.

*Consolidated Mining & Smelting Co. of Canada, Limited, Trail, B.C. (Adv. page 1026).

1133 GOLD LEAF.

*Canadian Bronze Powder Works, Montreal, Que.
*Hubbard, The C. H., Co., Limited, Toronto, Ont.
*Wilkinson, The J. E., Co., Limited, Toronto, Ont.

1134 GOLD MATTE.

Granby Consolidated Mining, Smelting & Power Co., Limited, Grand Forks, B.C.

1135 GOLDSMITHS.

*Ellis, P. W., & Co., Limited, Toronto, Ont. (Adv. page 855).
*Lees, Geo. H., & Co., Limited, Hamilton, Ont.
Wilkinson, The J. E., Co., Limited, Toronto, Ont.

1136 GONGS.

Clark, C. O., & Bro., St. Paul, Que.
*Garth Co., The, Montreal, Que.
*McAvity, T., & Sons, St. John, N.B.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).

1137 GOODS, Case.

See Furniture.

1138 GOVERNORS, Engine, Pump and Steam.

See Engines, stationary, horizontal and vertical.

1139 GRADERS, Road.

Sawyer & Massey Co., Limited, Hamilton, Ont.

1140 GRAMOPHONES.

Berliner Gramophone Co. of Canada, Limited, The, Montreal, Que.

1141 GRANITE BUILDING MATERIAL.

See Marble and Granite Building Material.

1142 GRANITE MONUMENTS.

See Monuments.

1143 GRANITEWARE.

See Enameledware.

1144 GRAPHITE.

*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027).
Domestic Specialty Co., Limited, Hamilton, Ont.
Electric Boiler Compound Co., Limited, The, Guelph, Ont.
Hamilton Facing Mill Co., Limited, Hamilton, Ont.

1145 GRATE BARS.

See Bars, boiler grate.

1146 GRATES, Flat.

Emerson & Fisher, Limited, St. John, N.B.
*Gurney Foundry Co., Limited, The, Toronto, Ont.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Leonard, E., & Sons, London, Ont. (Adv. page 1047.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862).
Plessisville, La Fonderie de, Plessisville, Que.
Robertson Machinery Co., Limited, The, Welland, Ont.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
Star Iron Co., Limited, Montreal, Que.
*Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861).

1147 GRATES, Shaking.

Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

1148 GRATING (Cast Iron), Area, Door and Sidewalk.

Robertson Machinery Co., Limited, The, Welland, Ont.

1149 GREASE, Axle.

Andrews, F. H., & Son, Quebec, Que.
Canadian Oil Co., Limited, Toronto, Ont.
*Dominion Oil Co., Limited, Hamilton, Ont.
Imperial Oil Co., Limited, The, Montreal, Que.
Queen City Oil Co., Limited, The, Toronto, Ont. (Adv. page 1028).
Seward, The L. B., Lubricating Co., Ottawa, Ont.

1150 GREASE, Lubricating.

Andrews, F. H., & Son, Quebec, Que.
Canadian Oil Co., Limited, Toronto, Ont.
Commercial Oil Co., Limited, The, Hamilton, Ont.
*Crown Oil Refining Co., Limited, Hamilton, Ont.
*Dominion Oil Co., Limited, Hamilton, Ont.
Crescent Oil Co., The, Hamilton, Ont.
Electric Boiler Compound Co., Limited, The, Guelph, Ont.
Imperial Oil Co., Limited, The, Montreal, Que.
*McColl Bros., & Co., Toronto, Ont.
Queen City Oil Co., Limited, The, Toronto, Ont. (Adv. page 1028).
Seward, The L. B., Lubricating Co., Ottawa, Ont.

1151 GREASE, Soap.

*Canada Glue Co., Limited, Brantford, Ont.
*Canadian Packing Co., Limited, The, London, Ont.
Harris, W., & Co., Toronto, Ont.
Marquis, F. Canac, Quebec, Que.
*O'Mara, Joseph, Palmerston, Ont.

1152 GRILLE WORK, Metal.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993).
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)
Major Mfg. Co., Limited, The, Montreal, Que.
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009).

1153 GRILLES, Elevator.

See Elevators.

1154 GRILLES, Wood.

Anglin, S., & Co., Kingston, Ont.
Cushing Bros. Co., Limited, Calgary, Alta.
Davidson, James, Ottawa, Ont.
Georgian Bay Shook Mills, Limited, Midland, Ont.
Gignac, J. H., Limited, Quebec, Que.
*Hurndall Novelty Furniture Co., Limited, Orangeville, Ont.
Kerr, J & J., Co., Limited, Petrolia, Ont.
Otterville Mfg. Co., Limited, Otterville, Ont.
*Paquet & Godbout, St. Hyacinthe, Que.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Rutherford, The Wm., & Sons Co. Montreal, Que.
*Schultz Bros. Co., Limited, The, Brantford, Ont.
*Sexton & Co., Limited, Toronto, Ont.
Wilson Bros., Limited, Collingwood, Ont.

1155 GRINDERS, Grain.

Fleury's Sons, J., Aurora, Ont.
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833).
*Goold, Shapley & Muir Co., Limited, Brantford, Ont.
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038).
*Paris Plow Co., Limited, The, Paris, Ont.
Stratford Bridge & Iron Works Co., Stratford, Ont.
*Vessot, S., & Co., Toronto, Ont.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.
Woodstock Wind-Motor Co., Limited, Woodstock, Ont.

1156 GRINDERS, Tool and Planer Knife.

*Banfield, W. H., & Sons, Toronto, Ont.
*Canadian Hart Wheels, Limited, Hamilton, Ont. (Adv. page 1019).
*Prescott Emery Wheel Co., Limited, Prescott, Ont.
*Stevens Co., of Galt, Limited, The, Galt, Ont. (Adv. page 1003).
Woodstock Wind-Motor Co., Limited, Woodstock, Ont.

1157 GRINDERS, Wood Pulp.

*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861).

1158 GRIPS, Timber.

*McFarlane-Neill Mfg. Co., Limited, St. Mary's, N.B.
*Pink, Thomas, Pembroke, Ont.

1159 GUARDS, Automatic Sprinkler.

McGuire, W. J., Limited, Toronto, Ont. (Adv. page 1039.)

1160 GUARDS, Lamp and Portable.

*Pringle, The R. E. T., Co., Limited, Montreal, Que.

1161 GUARDS, Tree and Plant, Wire.

Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044).
Manitoba Anchor Wire Fence Co., Limited, The, Winnipeg, Man.

1162 GUARDS, Window (Iron and Wire).

Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043).
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044).
Manitoba Anchor Wire Fence Co., Limited, The, Winnipeg, Man.
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)
*Munro Wire Works, Limited, New Glasgow, N.S.
Shipway Iron, Bell & Wire Mfg. Co., Limited, Toronto, Ont.
Watson, John, & Son, Montreal, Que.

1163 GUM, Chewing.

American Chicle Co., Toronto, Ont.
Bradshaw, I. D., & Co., Toronto, Ont.
*Somerville, C. R., London, Ont.

1164 GUMMER, Saw.

Jardine, A. B., & Co., Hespeler, Ont.
*Letson & Burpee, Limited, Vancouver, B.C.

1165 GUNPOWDER.

*Acadia Powder Co., Limited, Halifax, N.S.
*Hamilton Powder Co., Montreal, Que.
Standard Explosives, Limited, Montreal, Que.

1166 GYPSUM, Crude and Pure White.

*Albert Mfg. Co., Hillsborough, N.B.

1167 GYPSUM, Crushed.

Alabastine Co., Limited, The, Paris, Ont.
Manitoba Gypsum Co., Limited, Winnipeg, Man.

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1168 HAIR, Cattle (Washed).

*Barrie Tanning Co., Limited, The, Barrie, Ont. (Adv. page 1041.)
*Bonner Leather Co., The, Montreal, Que.
Marquis, F. Canac, Quebec, Que.

1169 HAIR, Curled, Weaving, Brush, etc.

*Delany & Pettit Co., Limited, The, Toronto, Ont. (Adv. page 1037.)
*Griffin Curled Hair Co., Limited, The, Toronto, Ont.

1170 HALTERS.

*Ackerman, B. F., Son & Co., Peterboro, Ont.
Adams Bros. Harness Mfg. Co., Limited, Toronto, Ont.
*Edwards, J. E., & Sons, Bracondale, Ont.
*General Leather Goods, Limited, Toronto, Ont.
*Great West Saddlery Co., Limited, The, Winnipeg, Man.
*Heney, E. N., Co., Limited, Montreal, Que.
*Lamontagne, Limited, Montreal, Que.

1171 HAMES.

*McFarlane-Neill Mfg. Co., Limited, St. Mary's, N.B.
*McKinnon Dash & Metal Works Co., Limited, St. Catharines, Ont. (Adv. page 826.)
*Martin Mfg. Co., Limited, The, Whitby, Ont.
*Skinner Co., Limited, The, Gananoque, Ont.
*Wilson & Cousins, Toronto, Ont.

1172 HAMMERS.

Fowler, The Josiah, Co., Limited, St. John, N.B.
*Pink, Thomas, Pembroke, Ont.
*Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Warnock, James, Co., Limited, Galt, Ont.
*Whitman & Barnes Mfg. Co. The, St. Catharines, Ont.

1173 HAMMERS, Drop and Steam Power.

*Banfield, W. H., & Sons, Toronto, Ont. (Adv. page 1048.)
*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828).
*Canadian Billings & Spencer, Limited, Welland, Ont. (Adv. page 1031).
*Canadian Rand Co., Limited, Montreal, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*MacGregor, Gourlay Co., Limited, The, Galt, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041).
Plessisville, La Fonderie de, Plessisville, Que.

1174 HAMMERS, Lumbermen's Log.

*Superior Mfg. Co., The, Toronto, Ont., (Adv. page 866).
Toronto Stamp & Stencil Works, Toronto, Ont.

1175 HAMMERS, Piano.

*Best, D. M., & Co., Toronto, Ont.
Bohne, W., & Co., Toronto, Ont.
*Higel, The Otto, Co., Limited, Toronto, Ont.

1176 HAMMOCKS.

Shurly & Derrett, Limited, Toronto, Ont. (Adv. page 845).
*Turner, J. J., & Sons, Peterboro, Ont.

1177 HAMS.

See Bacon.

1178 HANDLES, Adze, Hatchet and Hammer.

*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852).
*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
*Columbia Handle & Lumber Co., The, London, Ont.
*Crawford, W. C., Tilbury, Ont.
Gignac, J. H., Limited, Quebec, Que.
*Lachute Shuttle Co., Limited, Lachute Mills, Que.
*McFarlane-Neill Mfg. Co., Limited, The, St. Mary's, N.B.
*Still, J. H., Mfg. Co., Limited, St. Thomas, Ont

1179 HANDLES, Axe

*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852).
*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
*Crawford, W. C., Tilbury, Ont.
*Dominion Snath Co., The, Waterville, Que.
Gignac, J. H., Limited, Quebec, Que.
*Lachute Shuttle Co., Limited, The, Lachute Mills, Que.
*McFarlane-Neill Mfg. Co., Limited, The, St. Mary's, N.B.
*Still, J. H., Mfg. Co., Limited, St. Thomas, Ont.

1180 HANDLES, Broom.

*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852).
*Canada Wood Specialty Co., Limited, The, Orillia, Ont.
*Columbia Handle & Lumber Co., The, London, Ont.
*Crawford, W. C., Tilbury, Ont.
DeCew, T. H., & Son, Bruce Mines, Ont.
*Dominion Snath Co., The, Waterville, Que.
Irwin, R. U., & Son, Horning's Mills, Ont.
*Lachute Shuttle Co., Limited, Lachute Mills, Que.
*Londonderry Iron & Mining Co., Limited, The, Londonderry, N.S.
*Samson, Joseph, Quebec, Que.
*Still, J. H., Mfg. Co., Limited, St. Thomas, Ont.
*Thomas Bros., Limited, St. Thomas, Ont.

1181 HANDLES, Door (Metal).

Gurney-Tilden Co., Limited, The, Hamilton, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020).
Taylor-Forbes Co., Limited, Guelph, Ont.
Toronto Brass Mfg. Co., Toronto, Ont.

1182 HANDLES, Fork, Hoe, Rake, Sledge, Pick, Maul, Canthook and Peavy.

*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852).
*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
*Columbia Handle & Lumber Co., The, London, Ont.
*Crawford, W. C., Tilbury, Ont.
DeCew, T. H., & Son, Bruce Mines, Ont.
*Dominion Snath Co., The, Waterville, Que.
Gignac, J. H., Limited, Quebec, Que.
*Lachute Shuttle Co., Limited, Lachute Mills, Que.
*McFarlane-Neill Mfg. Co., Limited, The St. Mary's, N.B.
*Pink, Thomas, Pembroke, Ont.
*Still, J. H., Mfg. Co., Limited, St. Thomas, Ont.

1183 HANDLES, Machine.

*Canadian Billings & Spencer, Limited, Welland, Ont. (Adv. page 1031.)

1184 HANDLES, Plow and Cultivator.

Ackland, D., & Son, Limited, Winnipeg, Man.
Heard, John, & Co., St. Thomas, Ont.

1185 HANDLES, Saw.

*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852.)
*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
Burns, The E. R., Saw Co., Limited, Toronto, Ont.
*Welland Vale Mfg. Co., Limited, The, St. Catharines, Ont. (Adv. page 1040.)

1186 HANDLES, Shovel.

*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852.)
*Crawford, W. C., Tilbury, Ont.
*Lachute Shuttle Co., Limited, Lachute Mills, Que.

*Still, J. H., Mfg. Co., Limited, St. Thomas, Ont.

1187 HANDLES, Tool, Tinners', Jewellers' and Dentists'.

*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852.)
Canada Spool & Bobbin Co., Limited, Walkerton, Ont.
Gignac, J. H., Limited, Quebec, Que.

1188 HANGERS, Barn Door, etc.

Allith Mfg. Co., Limited, Hamilton, Ont.
*Louden Machinery Co., Guelph, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Taylor-Forbes Co., Limited, Guelph, Ont.

1189 HANGERS, Fire Door, Adjustable.

*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)
Taylor-Forbes Co., Limited, Guelph, Ont.

1190 HANGERS, Joist and Wall.

Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
McGregor & McIntyre, Limited, Toronto, Ont.
Taylor-Forbes Co., Limited, Guelph, Ont.

1191 HANGERS, Pipe.

Bennett & Wright Co., Limited, The, Toronto, Ont.
*McAvity, T., & Sons, St. John, N.B.

1192 HANGERS, Shafting.

Augustin & Daudelin, St. Hyacinthe, Que.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Clarke-Demill Co., Limited, Hespeler, Ont. (Adv. page 838.)
*Dodge Mfg. Co. of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
Gardner, Robt., & Son, Montreal, Que. (Adv. page 1043.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Letson & Burpee, Limited, Vancouver, B.C.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Owen Sound Iron Works Co., Limited, The, Owen Sound, Ont.
Plessisville, La Fonderie de, Plessisville, Que.
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
*St. John Iron Works, Limited, St. John, N.B.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
*Stratford Mill Building Co., Limited, The, Stratford, Ont.

1193 HANGINGS, Wall Paper.

See Paper, Wall or Hanging.

1194 HARDWARE, Builders'.

Belleville Hardware Co., Limited, The, Belleville, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
*Hahn Brass Co., Limited, The, New Hamburg, Ont.
*Jenking Brass Mfg. Co., Limited, Montreal, Que.
*Louden Machinery Co., Guelph, Ont.
Montreal Hardware Mfg. Co., Limited, Montreal, Que.
National Hardware Co., Limited, Orillia, Ont.
Peterboro Lock Mfg. Co., Limited, The, Peterboro, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Taylor-Forbes Co., Limited, Guelph, Ont.
Tilden, Gurney & Co., Limited, Winnipeg, Man.
Toronto Brass Mfg. Co., Toronto, Ont.

1195 HARDWARE, Cabinet Makers' or Furniture

*Gilson Mfg. Co., Limited, Guelph, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

1196 HARDWARE, Carriage.

*Armstrong, The J. B., Mfg. Co., Limited, Guelph, Ont. (Adv. page 996.)
Carriage Mountings Co., Limited, Niagara Falls, Ont.
*Guelph Carriage Top Co., Guelph, Ont.
*McKinnon Dash & Metal Works Co., Limited, St. Catharines, Ont. (Adv. page 826.)
*Skinner Co., Limited, The, Gananoque, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

1197 HARDWARE, Coffin and Casket.

*Girard & Godin, Three Rivers, Que.
*Globe Casket Co., The, London, Ont.
*National Casket Co., Toronto, Ont.
Semmens & Evel Casket Co., Limited, The, Hamilton, Ont.
Thompson, The D. W., Co., Limited, Toronto, Ont.
*Toronto Silver Plate Co., Limited, The, Toronto, Ont.

1198 HARDWARE, Piano.

Bowmanville Foundry Co., Limited, The, Bowmanville, Ont.
Taylor-Forbes Co., Limited, Guelph, Ont.

1199 HARDWARE, Saddlery.

*Ackerman, B. F., Son & Co., Peterboro, Ont.
Adams Bros. Harness Mfg. Co., Limited, Toronto, Ont.
Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
*Great West Saddlery Co., Limited, The, Winnipeg, Man.
*McKinnon Dash & Metal Works Co., Limited, St. Catharines, Ont. (Adv. page 826.)
*Martin Mfg. Co., Limited, The, Whitby, Ont.
*Skinner Co., Limited, The, Gananoque, Ont.

1200 HARDWARE SPECIALTIES.

Allith Mfg. Co., Limited, Hamilton, Ont.
Auto Strop Safety Razor Co., Limited, The, Montreal, Que. (Adv. page 1013.)
Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
Carriage Mountings Co., Limited, Niagara Falls, Ont.
*Cumming Mfg. Co., Limited, The, Renfrew, Ont.
*Louden Machinery Co., Guelph, Ont.
Montreal Hardware Mfg. Co., Limited, The, Montreal, Que.
Oneida Community, Limited, Niagara Falls, Ont.
*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)

1201 HARNESS.

*Ackerman, B. F., Son & Co., Peterboro, Ont.
Adams Bros. Harness Mfg. Co., Limited, Toronto, Ont.
Eaton, The T., Co., Limited, Toronto, Ont.
*Great West Saddlery Co., Limited, The, Winnipeg, Man.
*Heney, E. N., Co., Limited, Montreal, Que.
Jolley, James, & Sons, Limited, Hamilton, Ont.
Kelly's Limited, Halifax, N.S.
*Lamontagne Limited, Montreal, Que.
*Wood Bros., St. Catharines, Ont.

1202 HARROWS, Disc.

*Bailey-Underwood Co., Limited, New Glasgow, N.S.
*Belanger, A., Montmagny, Que.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Bissell, T. E., Co., Limited, Elora, Ont.
*Cockshutt Plow Co., Limited, Brantford, Ont.
*Cossitt Co., Limited, The, Brockville, Ont.
*Faucher & Fils, Montreal, Que.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*International Harvester Co. of Canada, Limited, Hamilton, Ont. (Adv. page 848.)
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Maxwell, David, & Sons, St. Mary's, Ont.
*Noxon Co., Limited, The, Ingersoll, Ont.
*Paris Plow Co., Limited, The, Paris, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.
*Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)
*Wilkinson Plow Co., Toronto, Ont.

1203 HARROWS, Drag, Spike-Tooth.

*Bailey-Underwood Co., Limited, New Glasgow, N. S.
*Belanger, A., Montmagny, Que.
*Cockshutt Plow Co., Limited, Brantford, Ont.
*Faucher & Fils, Montreal, Que.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*International Harvester Co. of Canada, Limited, Hamilton, Ont. (Adv. page 848.)
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Noxon Co., Limited, The, Ingersoll, Ont.
*Paris Plow Co., Limited, The, Paris, Ont.
Shantz, P. E., Preston, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.
Tolton Bros., Limited, Guelph, Ont.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.
*Wilkinson Plow Co., Toronto, Ont.

1204 HARROWS, Spring-Tooth.

*Bailey-Underwood Co., Limited, New Glasgow, N. S.
*Belanger, A., Montmagny, Que.
*Cossitt Co., Limited, The, Brockville, Ont.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*International Harvester Co. of Canada, Limited, Hamilton, Ont. (Adv. page 848.)
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Noxon Co., Limited, The, Ingersoll, Ont.

1205 HARVESTERS, Corn.

*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)

1206 HARVESTERS, Pea.

*Maxwell, David, & Sons, St. Mary's Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.
*Tolton Bros., Limited, Guelph, Ont.
*Wortman & Ward Co., Limited, The, London, Ont.

1207 HARVESTERS, Self-Binding.

See Binders, harvesting.

1208 HATCHETS.

Fowler, The Josiah, Co., Limited, St. John, N. B.
*Gilmour Bros. & Co., Montreal, Que.
*Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Warnock, The James, Co., Limited, Galt, Ont.
*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

1209 HATCHWAYS, Boat.

Hutchinson, C. A., & Co., Montreal, Que.
*Parkin Elevator Co., Limited, The, Hespeler, Ont.

1210 HATS, Cloth.

Bruce Mfg. Co., The, Toronto, Ont.
*Hastings, T. W., Cap Mfg. Co., London, Ont.
Maritime Hat & Cap Co., The, Truro, N. S.
*Punchard, Chas. C., & Co., Toronto, Ont.

1211 HATS, Felt.

Crean, Robert, & Co., Limited, Toronto, Ont.
*Dominion Straw Goods Mfg. Co., Montreal, Que.
Godin, J., St. Paul, Que.
Globe Hat Works Co., Montreal, Que.
Goulding, G., & Sons, Toronto, Ont.
Guillet, E., & Sons, Limited, Marieville, Que.
*Strachan Bros., Toronto, Ont.
Toronto Hat Mfg. Co., Toronto, Ont.
Waldron, Drouin, Co., Limited, The, Montreal, Que.
Walker, E. C., & Sons, Toronto, Ont.
Wolthausen Hat Corporation, Limited, The, Brockville, Ont.
Woodland, J. M., & Co., Toronto, Ont.

1212 HATS, Oiled.

*Tower Canadian Oiled Clothing Co., Limited, Toronto, Ont.

1213 HATS, Ready-to-wear.

Boulter, Waugh & Co., Limited, Montreal, Que.
Fairweather, J. W. T., & Co., Toronto, Ont.
Goulding, G., & Sons, Toronto, Ont.
*Strachan Bros., Toronto, Ont.
Walker, E. C., & Sons, Toronto, Ont.
Woodland, J. M., & Co., Toronto, Ont.

1214 HATS, Rubber.

Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)

1215 HATS, Straw.

Crean, Robert, & Co., Limited, Toronto, Ont.
*Dominion Straw Goods Mfg. Co., Montreal, Que.
Allan, A. A., & Co., Toronto, Ont.
Goulding, G., & Sons, Toronto, Ont.
Guillet, E., & Sons, Limited, Marieville, Que.
Paquet Co., Limited, The, Quebec, Que.
*Strachan Bros., Toronto, Ont.
St. Johns Straw Works Co., Limited, St. Johns, Que.
Toronto Hat Mfg. Co., Toronto, Ont.
Walker, E. C., & Sons, Toronto, Ont.
Woodland, J. M., & Co., Toronto, Ont.

1216 HAY.

*Brackman-Ker Milling Co., Limited, The, Victoria, B.C.
*Dwyer, W. H., Co., Limited, Ottawa, Ont.
*Georgian Bay Milling & Power Co., Limited, The, Meaford, Ont.
*McIntosh, P., & Son, Toronto, Ont.
*Silver, H. R., Limited, Halifax, N.S.
*Thomson, Walter, & Son, Limited, London, Ont.

1217 HEADING.

*Canada Wood Specialty Co., Limited, The, Orillia, Ont.
Cargill, H., & Son, Cargill, Ont.

*Crawford, W. C., Tilbury, Ont.
Pincombe, R. M., Strathroy, Ont.
Ransford, John, Clinton, Ont.
*Sutherland, Innes Co., Limited, The, Chatham, Ont. (Adv. page 856.)

1218 HEADLIGHTS (Engine and Electric Car).

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Piper, The Hiram L., Co., Limited, Montreal, Que.
*Piper, The N. L., Railway Supply Co., Limited, Toronto, Ont.

1219 HEADS, Exhaust.

Canadian Buffalo Forge Co., Limited, Montreal, Que.
Darling Bros., Limited, Montreal, Que.
Sheldons, Limited, Galt, Ont. (Adv. page 859.)

1220 Heads, Matcher.

See Machinery, Woodworking.

1221 HEADWEAR, Children's.

*Bruce Mfg. Co., Toronto, Ont.
*Knox Mfg. Co., Toronto, Ont.

1222 HEARSES.

*Girard & Godin, Three Rivers, Que.
Greer, A. B., London, Ont.
*National Casket Co., Toronto, Ont.

1223 HEATERS, Air-tight.

*Kemp Mfg. & Metal Co., Limited, The, Winnipeg, Man.
McLennan, McFeely & Co., Limited, Vancouver, B.C.
*Moore, The D., Co., Limited, Hamilton, Ont.

1224 HEATERS, Base Burner.

Buck, The William, Stove Co., Limited, Brantford, Ont.
Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
*Clare Bros. & Co., Limited, Preston, Ont.
Guelph Stove Co., Limited, Guelph, Ont.
Gurney, Tilden Co., Limited, The, Hamilton, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)
*Moore, The D., Co., Limited, Hamilton, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Western Foundry Co., Limited, The, Wingham, Ont.

1225 HEATERS, Car.

Crossen Car Mfg. Co. of Cobourg, Limited, The, Cobourg, Ont.

1226 HEATERS, Feed Water.

*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Darling Bros., Limited, Montreal, Que.
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044.)
*Leonard, E., & Sons, London, Ont. (Adv. page 1047.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)

1227 HEATERS AND HEATING APPARATUS, Hot Water and Steam.

Bennett & Wright C., Limited, The, Toronto, Ont.
Darling Bros., Limited, Montreal, Que.
*Dominion Radiator Co., Limited, The, Toronto, Ont.
Farquhar Bros., Halifax, N.S.
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
*Gurney Foundry Co., Limited, The, Toronto, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Hughes, J. W., & Son, Montreal, Que.
Ives, The H. R., Co., Limited, Montreal, Que.
*Leonard, E., & Sons, London, Ont. (Adv. page 1047.)
*Longard Bros., Halifax, N. S.
McGuire, W. J., Limited, Toronto, Ont. (Adv. page 1039.)
*Pease Foundry Co., Limited, Toronto, Ont.
*Pease-Waldon Co., Limited, Winnipeg, Man.
Picard, O., & Fils, Quebec, Que.
Star Iron Co., Limited, Montreal, Que.
Sydney Foundry & Machine Works, Limited, The, Sydney, N.S.
Toronto Furnace & Crematory Co., Limited, Toronto, Ont.
*Vanstone Heating & Plumbing Co., Limited, The, New Westminster, B.C.
*Warden King, Limited, Montreal, Que.

1228 HEATING APPARATUS, Hot Air.

Canadian Buffalo Forge Co., Limited, Montreal, Que.
*Clare Bros. & Co., Limited, Preston, Ont.
Hughes, J. W., & Son, Montreal, Que.
*Gurney Foundry Co., Limited, The, Toronto, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
McGuire, W. J., Limited, Toronto, Ont. (Adv. page 1039.)
*Pease Foundry Co., Limited, The, Toronto, Ont.
*Pease-Waldon Co., Limited, Winnipeg, Man.
Picard, O., & Fils, Quebec, Que.
Sheldons, Limited, Galt, Ont. (Adv. page 859.)
Star Iron Co., Limited, Montreal, Que.

1229 HEATING APPLIANCES, Electric.

Canadian General Electric Co., Limited, Toronto, Ont.
Electrical Construction Co., Limited, The, London, Ont.

1230 HEATING, Fan or Hot Blast System.

McGuire, W. J., Limited, Toronto, Ont. (Adv. page 1039.)
Sheldons, Limited, Galt, Ont. (Adv. page 859.)

1231 HEELS AND HEEL STOCK.

*Blouin, F., Quebec, Que.
*Guay, Eugene, Montreal, Que.
Richard & Co., Quebec, Que.
*Rochette, C., Quebec, Que.
*White, The Robt., Co., Limited, Montreal, Que.

1232 HEELS AND SOLES, Rubber.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)
Durham Rubber Co., Limited, Bowmanville, Ont. (Adv. page 844.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)
*Merchants Rubber Co., Limited, The, Berlin, Ont.

1233 HIDES.

*Carter, E. T., & Company, Toronto, Ont.
Goodhue, J. L., & Company, Danville, Que.
*Harris Abattoir Co., Limited, The, Toronto, Ont.
*Kimble, John, & Son, St. John, N.B.
Marquis, F. Canac, Quebec, Que.
*Martin, The D. B., Co., Limited, West Toronto, Ont.
*Peters' Sons, C. H., St. John, N.B.

1234 HINGES, Butt, Blind, Door, etc.

Cowan & Britton, Gananoque, Ont.
*Eclipse Mfg. Co., Limited, The, Ottawa, Ont.
Montreal Hardware Mfg. Co., Limited, The, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Taylor-Forbes Co., Limited, Guelph, Ont.

1235 HINGES, Spring.

Cowan & Britton, Gananoque, Ont.
*McAvity, T., & Sons, St. John, N.B.
Mitchell, The Robt., Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Taylor-Forbes Co., Limited, Guelph, Ont.

1236 HINGES, Strap and Screw.

Cowan & Britton, Gananoque, Ont.
London Rolling Mill Co., Limited, London, Ont.
Montreal Hardware Mfg. Co., Limited, The, Montreal, Que.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

1237 HITCHES, Plow.

American-Abell Engine & Thresher Co., Limited, Toronto, Ont.

1238 HOBBLES.

*Ackerman, B. F., Son & Company, Peterborough, Ont.

1239 HODS, Coal.

*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Kemp Mfg. Company, Toronto, Ont.
*McClary Mfg. Company, The, London, Ont. (Adv. page 1022.)

1240 HOES.

Bedford Mfg. Company, The, Bedford, Que.
*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
Warnock, The James, Co., Limited, Galt, Ont.
*Welland Vale Mfg. Co., Limited, St. Catharines, Ont. (Adv. page 1040.)

1241 HOES, Horse.

See Scufflers.

1242 HOISTS, Air.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Canadian Rand Co., Limited, Montreal, Que.

1243 HOISTS, Carriage.

See Elevators.

1244 HOISTS, Friction and Gear.

*Doig, A. E., & Company, Toronto, Ont.
Marsh & Henthorn, Belleville, Ont.
*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863.)
Robertson Machinery Co., Limited, The, Welland, Ont.

1245 HOISTS, Mining.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N. S. (Adv. page 862.)
Robertson Machinery Co., Limited, The, Welland, Ont.

1246 HOLDERS, Bag.

Computing Scale Co. of Canada, Limited, The, Toronto, Ont.

1247 HOLDERS, Shoe.

Taylor-Forbes Co., Limited, Guelph, Ont.

1248 HOLDERS AND PULLS, Label.

*Hahn Brass Co., Limited, The, New Hamburg, Ont.

1249 HOLLOW-WARE, Cast Iron.

Bowes, Jamieson & Company, Hamilton, Ont.
Buck, The Wm., Stove Co., Limited, Brantford, Ont.
*Clare Bros. & Co., Limited, Preston, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
*McClary Mfg. Company, The, London, Ont. (Adv. page 1022.)
*Moore, The D., Co., Limited, Hamilton, Ont.
Record Foundry & Machine Company, Moncton, N.B.
Stewart, The James, Mfg. Co., Limited, Woodstock, Ont.
Plessisville, La Fonderie de, Plessisville, Que.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

1250 HOLLOW-WARE, Silver Plated.

*Hemming Mfg. Co., Limited, Montreal, Que. (Adv. page 1013.)
*Meriden Britannia Co., Limited, Hamilton, Ont.
Standard Silver Co., Limited, Toronto, Ont.
*Toronto Silver Plate Co., Limited, Toronto, Ont.

1251 HOLLOW-WARE, Sterling Silver.

Birks, Henry, & Sons, Montreal, Que.
Ellis, P. W., & Co., Limited, Toronto, Ont. (Adv. page 855.)
*Hemming Mfg. Co., Limited, Montreal, Que. (Adv. page 1013.)
*Meriden Britannia Co., Limited, Hamilton, Ont.
*Roden Bros., Toronto, Ont. (Adv. page 1048.)
*Toronto Silver Plate Co., Limited, Toronto, Ont.

1252 HOMESPUNS.

See Cloth, homespun.

1253 HOMINY.

*McIntosh, P., & Son, Toronto, Ont.

1254 HONES, Razor.

*Canadian Hart Wheels, Limited, Hamilton, Ont. (Adv. page 1019.)

1255 HOODS AND BODIES, Hat (Wool).

Globe Hat Works Company, Montreal, Que.

1256 HOOKS, Cant.

*McFarlane-Neill Mfg. Co., Limited, St. Mary's, N.B.
*Pink, Thomas, Pembroke, Ont.
Warnock, The James, Co., Limited, Galt, Ont.

1257 HOOKS, Cornice and Screw.

Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Dominion Wire Manufacturing Co., Limited, Montreal, Que. (Adv. page 847.)
Taylor-Forbes Co., Limited, Guelph, Ont.

1258 HOOKS, Hat and Coat.

Belleville Hardware Co., Limited, The, Belleville, Ont.

Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
Clatworthy & Son, Toronto, Ont.
Mitchell, The Robt., Co., Limited, Montreal, Que.
Otterville Mfg. Co., Limited, Otterville, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Taylor-Forbes Co., Limited, Guelph, Ont.

1259 HOOKS, Reaping.

Bedford Mfg. Company, The, Bedford, Que.
*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
*Welland Vale Mfg. Co., Limited, The, St. Catharines, Ont. (Adv. page 1040.)

1260 HOOKS, Rug.

*Garrett, John E., New Glasgow, N.S.

1261 HOOKS AND EYES.

Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
*Montreal Suspender & Umbrella Mfg. Company, Montreal, Que.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

1262 HOOPS, Barrel.

Cargill, H., & Son, Cargill, Ont.
Irwin, R. U., & Son, Hornings Mills, Ont.
Laidlaw Bale-Tie Company, The, Hamilton, Ont.
*Sutherland, Innes Co., Limited, The, Chatham, Ont. (Adv. page 856.)

1263 HOOPS, Wire.

Dominion Wire Manufacturing Co., Limited, Montreal, Que. (Adv. page 847.)
Laidlaw Bale-Tie Company, The, Hamilton, Ont.

1264 HORSE NAILS.

See Nails, horseshoe.

1265 HORSE POWERS, Sweep.

*Belanger, A., Montmagny, Que.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Hamilton, The Peter, Co., Limited, Peterborough, Ont.
Marsh & Henthorn, Belleville, Ont.
Northern Iron Works, Limited, Winnipeg, Man.
Sawyer & Massey Co., Limited, Hamilton, Ont.
Waterloo Mfg. Co., Limited, Waterloo, Ont.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.

1266 HORSE POWERS, Tread.

*Belanger, A., Montmagny, Que.
*Bell, B., & Son Co., Limited, St. George, Ont.
Chalifoux, O., & Fils, St. Hyacinthe, Que.
New Hamburg Mfg. Co., Limited, New Hamburg, Ont.
Northern Iron Works, Limited, Winnipeg, Man.
Sawyer & Massey Co., Limited, Hamilton, Ont.

1267 HORSE SHOES.

*Montreal Rolling Mills Company, Montreal, Que. (Adv. page 842).
Peck Rolling Mills, Limited, The, Montreal, Que.

1268 HOSE FITTINGS.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).

1269 HOSE, Leather (Fire).

*McLaren, The J. C., Belting Company Montreal, Que. (Adv. page 1017).
*Sadler & Haworth, Montreal, Que. (Adv. page 1002).

1270 HOSE, Linen and Cotton.

*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018).
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont.

1271 HOSE, Rubber, Fire, Suction, Water, Steam, Air Brake, Pneumatic Tool, Air Drill and Hydraulic.

*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018).
Durham Rubber Co., Limited, Bowmanville, Ont. (Adv. page 844).
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

1272 HOSIERY, Cashmere, Cotton, Woollen and Worsted.

Avon Hosiery Company, Stratford, Ont.
Ballantyne, R. M., Limited, Stratford, Ont.
Beaumont, Joseph, Glen Williams, Ont.
Bird Woollen Mill Co., Limited, The, Bracebridge, Ont.
Carss Mackinaw Clothing Company, Orillia, Ont.
Chipman-Holton Knitting Co., Limited, The, Hamilton, Ont.
Goderich Knitting Co., Limited, The, Goderich, Ont.
*Hudson Bay Knitting Company, The, Montreal, Que.
*Kingston Hosiery Co., Limited, Kingston, Ont.
Penmans Limited, Paris, Ont. (Adv. page 1063.)
*Universal Knitting Co., Limited, The, Toronto, Ont.

1273 HOSIERY, Silk.

*Corticelli Silk Co., Limited, Montreal, Que.

1274 HOUSE MATERIALS.

See Mills, Planing, and Fittings, Wood (Bank, Store and Office).

1275 HOUSES, Portable.

*B. C. Mills Timber & Trading Company, Vancouver, B.C.
*Empire Lumber Co., Limited, Toronto, Ont.

1276 HUBS.

Ackland, D., & Son, Limited, Winnipeg, Man.
*Chatham Bent Goods Co., Limited, The, Chatham, Ont.
Heard, John, & Company, St. Thomas, Ont.
Hore, F. W., & Son, Limited, Hamilton, Ont.
Loughead Bros., Limited, Sarnia, Ont.
*McVean, O. & W., Dresden, Ont.
*Victoria Wheel Works, Galt, Ont. (Adv. page 843).
West Lorne Wagon Co., Limited, West Lorne, Ont.
*Windsor Turned Goods Co., Limited, The, Windsor, Ont.

1277 HUBS, Bicycle and Sulky.

Morrow, The John, Screw, Limited, Ingersoll, Ont.

1278 HULLERS, Clover.

American-Abell Engine & Thresher Co., Limited, Toronto, Ont.
Sawyer & Massey Co., Limited, Hamilton, Ont.

1279 HUMIDIFIERS.

Canadian Buffalo Forge Co., Limited, Montreal, Que.

1280 HUSKERS AND SHREDDERS, Corn.

*White, The George, & Sons Co., Limited, London, Ont.

1281 HYDRANTS.

*Brown Machine Company, The, New Glasgow, N.S.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993).
Doherty Mfg. Co., Limited, Sarnia, Ont.
*Garth Company, The, Montreal, Que.
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833).
*Kerr Engine Co., Limited, The, Walkerville, Ont. (Adv. page 1033).
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*McAvity, T., & Sons, St. John, N.B.
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019).
Matheson, I., & Company, Limited, New Glasgow, N.S. (Adv. page 862).
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).
Niagara Falls Machine & Foundry Co., Limited, Niagara Falls, Ont. (Adv. page 1028).
*Pacific Coast Pipe Co., Limited, Vancouver, B.C.
*Vogel, H. G., Company, Montreal, Que. (Adv. page 1038).
*Whitfield, The John, Company, Toronto, Ont.

1282 ICE.

*Wilson, The B., Co., Limited, Victoria, B.C.

1283 ICE CREAM.

City Dairy Co., Limited, Toronto, Ont.
Neilson, William, Limited, Toronto, Ont.

1284 ICE CREAM MACHINERY AND SUPPLIES.

See Machinery, ice cream.

1285 ICINGS, Cake.

Codville Co., Limited, The, Winnipeg, Man.
Cowan Co., Limited, The, Toronto, Ont.
McLarens, Limited, Hamilton, Ont.
White Star Mfg. Co., The, Winnipeg, Man.

1286 IGNITION ACCESSORIES

Canadian General Electric Co., Limited, Toronto, Ont.

1287 ILLUSTRATIONS, Advertising.

See Engraving, photo, etc.

1288 IMPLEMENTS, Hand Farming.

See Hoes, Rakes, etc.

1289 INCUBATORS AND BROODERS.

*Campbell, The Manson, Co., Limited, Chatham, Ont.
*International Stock Food Co., Toronto, Ont.

1290 INDICATORS, Speed.

*McAvity, T., & Sons, St. John, N.B.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).

1291 INGOTS, Phosphor Bronze, Copper and Tin.

Canada Metal Co., Limited, The, Toronto, Ont. (Adv. page 869).
Lumen Bearing Co., West Toronto, Ont. (Adv. page 1031).
Syracuse Smelting Works, Montreal, Que.

1292 INJECTORS, Steam and Boiler.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993).
*Hamilton Brass Mfg. Co., Limited, The, Hamilton, Ont.
*McAvity, T., & Sons, St. John, N.B.
Mitchell, The Robert, Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).
Penberthy Injector Co., Limited, Windsor, Ont. (Adv. page 865).

1293 INK, Burnishing.

American Dressing Co., Montreal, Que.

1294 INK, Printing and Lithographing.

*Ault & Wiborg Co. of Canada, Limited, Toronto, Ont.
*Canada Printing Ink Co., Limited, Toronto, Ont.
Manton Bros., Toronto, Ont.

1295 INK, Stencil.

*Carbon Paper & Ribbon Mfg. Co., Limited, Toronto, Ont.

1296 INK, Writing.

Domestic Specialty Co., Limited, Hamilton, Ont.
*Sultana Mfg. Co., Montreal, Que.
*Underwood, John, & Co., Toronto, Ont.

1297 INSOLES, Boot and Shoe.

*Blouin, F., Quebec, Que.
*Barrie Tanning Co., Limited, The, Barrie, Ont. (Adv. page 1041).
*Guay, Eugene, Montreal, Que.
*Duclos & Payan, St. Hyacinthe, Que.
*Rochette, C., Quebec, Que.
*White, The Robt., Co., Limited, Montreal, Que.

1298 INSPIRATORS.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).

1299 INSTRUMENTS, Band.

*Whaley, Royce Co., Limited, Toronto, Ont.

1300 INSTRUMENTS, Electric.

Canadian Westinghouse Co., Limited, Hamilton, Ont.

1301 INSTRUMENTS, Musical.

*Whaley, Royce Co., Limited, Toronto, Ont.
Williams, The R. S., & Sons Co., Limited, Toronto, Ont.

1302 INSTRUMENTS, Surgical.

Lyman, Sons & Co., Montreal, Que.

1303 Insulators, Glass and Porcelain.

Canadian General Electric Co., Limited, Toronto, Ont.
Diamond Flint Glass Co., Limited, Montreal, Que.
*Pringle, The R. E. T., Co., Limited, Montreal, Que.

1304 INVERTS, Clay and Vitrified.

Dominion Sewer Pipe Co., Limited, The, Swansea, Ont. (Adv. page 1035).
Hamilton & Toronto Sewer Pipe Co., Limited, Hamilton, Ont.
*Standard Drain Pipe Co. of St. Johns, Que., Limited, The, St. Johns, Que. (Adv. page 854.)

1305 IRON, Bar.

Hamilton Steel & Iron Co., Limited, The, Hamilton, Ont. (Adv. page 1029).
London Rolling Mill Co., Limited, London, Ont.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842).
Peck Rolling Mills, Limited, The, Montreal, Que.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
*Starr Mfg. Co., Limited, Dartmouth, N.S.

1306 IRON, Chloride of.

Cowan, John, Co., Limited, Montreal, Que.

1307 IRON, Corrugated.

Irwin, Thos., & Son, Hamilton, Ont.

*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999).
*Metallic Roofing Co. of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995).
*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039).
Winnipeg Ceiling & Roofing Co., Winnipeg, Man.

1308 IRON, Galvanized.

Kemp Mfg. Co., Toronto, Ont.
Lysaght, John, Limited, Montreal, Que. (Adv. Inside Back Inner Cover.)

1309 IRON, Pig.

Algoma Steel Co., Limited, The, Sault Ste. Marie, Ont. (Adv. page 1059.)
Canada Iron Furnace Co., Limited, Montreal, Que.
*Dominion Iron & Steel Co., Limited, Sydney, N.S.
*Frankel Bros., Toronto, Ont.
Hamilton Steel & Iron Co., Limited, The, Hamilton, Ont. (Adv. page 1029).
*Londonderry Iron & Mining Co., Limited, Londonderry, N.S.
Nova Scotia Steel & Coal Co., Limited, New Glasgow, N.S. (Adv. page 870).

1310 IRON, Pig (Charcoal).

Algoma Steel Co., Limited, The, Sault Ste. Marie, Ont. (Adv. page 1059.)
Canada Iron Furnace Co., Limited, Montreal, Que.
Deseronto Iron Co., Limited, Deseronto, Ont.
Nova Scotia Steel & Coal Co., Limited, New Glasgow, N.S. (Adv. page 870).

1311 IRON GOODS, Galvanized.

Aubry, A., & Fils, Montreal, Que.
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031).
Farquhar Bros., Halifax, N.S.
Irwin, Thos., & Sons, Hamilton, Ont.
Kemp Mfg. Co., Toronto, Ont.
*Kemp Mfg. & Metal Co., Limited, The, Winnipeg, Man.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022).
*Riddell, John E., Hamilton, Ont.
Shaw & Mason, Limited, Sydney, N.S.
Wheeler & Bain, Toronto, Ont.

1312 IRON GOODS, Sheet.

Aubry, A., & Fils, Montreal, Que.
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031).
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022).
Robertson, The James, Co., Limited, Montreal, Que.

1313 IRON WORK, Architectural and Structural.

See Steel Work, architectural, etc.

1314 IRON WORKS, Cast.

See Castings, Iron.

1315 IRON WORK, Fancy Wrought.

Canadian Ornamental Iron Co., Toronto, Ont.
*Chadwick Bros., Hamilton, Ont.
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043).
Hutchison, C. A., & Co., Montreal, Que.
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009).
*Parkin Elevator Co., Limited, The, Hespeler, Ont.
Shipway Iron, Bell & Wire Mfg. Co., Limited, Toronto, Ont.
Western Iron Works, Limited, Winnipeg, Man.

1316 IRONS, Paint.

*Whitall, A. R., Montreal, Que.

1317 IRONS, Sad, Electric.

Canadian General Electric Co., Limited, Toronto, Ont.
Eastman Machine Co., Limited, The, Toronto, Ont.

1318 IRONS, Sad or Tailors' Hand.

Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015).
Eastman Machine Co., Limited, The, Toronto, Ont.
Kemp Mfg. Co., Toronto, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020).
Taylor-Forbes Co., Limited, Guelph, Ont.

1319 IRONS, Tuyere.

*Belanger, A., Montmagny, Que.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Jardine, A. B., & Co., Hespeler, Ont.
Plessisville, La Fonderie de, Plessisville, Que.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020).

J

1320 JACKETS, Ladies'.

See Cloaks, Suits and Costumes.

1321 JACKS, Hoisting and Lifting.

*Bell, B., & Sons Co., Limited, St. George, Ont.
*Canadian Rand Co., Limited, Montreal, Que.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.

1322 JACKS, Sawmill, Log.

Madison Williams Mfg. Co., Limited, The, Lindsay, Ont.

1323 JACKS, Track and Car Replacing.

*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041).

1324 JAMS AND JELLIES.

*Burlington Canning Co., Limited, The, Burlington, Ont.
*Canadian Canners, Limited, Hamilton, Ont.
*Davies, The Wm., Co., Limited, Toronto.
*Dunn, Wm. H., Montreal, Que.
Lytle, The T. A., Co., Limited, Toronto, Ont.
*McCormick Mfg. Co., Limited, London, Ont.
Northland Mfg. Company, The, Toronto, Ont.
Ozo Co., Limited, The, Montreal, Que.
Quebec Preserving Company, Quebec, Que. (Adv. page 1032.)
*Smith, E. D., Winona, Ont.
Upton, The T., Co., Limited, Hamilton, Ont.

1325 JAPANNED WARE.

*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)

1326 JAPANS.

Berry Bros., Limited, Walkerville, Ont.
*Brandram-Henderson, Limited, Montreal, Que. (Adv. page 840.)
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
Commercial Oil Co., Limited, The, Hamilton, Ont.
Crescent Oil Company, The, Hamilton, Ont.
*Crown Oil Refining Co., Limited, Hamilton, Ont.
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
*International Varnish Co., Limited, Toronto, Ont. (Adv. page 859.)
Jamieson, R. C., & Co., Limited, Montreal, Que.
Langmuir, James, & Co., Limited, Toronto, Ont.
*Moore, Benjamin, & Co., Limited, West Toronto, Ont.
Muirhead, A., Toronto, Ont.
*McCaskill, Dougall & Co., Montreal, Que. (Adv. page 1047.)
McColl Bros. & Co., Toronto, Ont.
*Pendray, W. J., Victoria, B.C.
*Ramsay, A., & Son Co., Montreal, Que.
*Scarfe & Co., Brantford, Ont.
Sherwin-Williams Co., The, Montreal, Que.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
Stephens, G. F., & Co., Limited, Winnipeg, Man.

1327 JARS, Fruit.

Diamond Flint Glass Co., Limited, Montreal, Que.
*Humphreys Glass Co., Limited, Trenton, N.S.
Sydenham Glass Co. of Wallaceburg, Limited, The, Wallaceburg, Ont.

1328 JERSEYS AND GOLF JACKETS.

Ballantyne, R. M., Limited, Stratford, Ont.
*Hewson Woollen Mills, Limited, Amherst, N.S.
*Knittofit Mfg. Co., The, Montreal, Que.
Monarch Knitting Co., Limited, The, Dunnville, Ont.
*Newlands & Co., Galt, Ont.
Penmans, Limited, Paris, Ont. (Adv. page 1063.)
Reliance Knitting Co., Limited, The, Toronto, Ont.
Turnbull, The C., Co., of Galt, Limited, Galt, Ont.
Warren Bros., St. Catharines, Ont.

1329 JEWELRY.

Auto Strop Safety Razor Co., Limited, The, Montreal, Que. (Adv. page 1013.)
Birks, Henry, & Sons, Limited, Montreal, Que.
*Bramley, Wm., Montreal, Que.
Brown, J. E., & Co., Limited, Toronto, Ont.
Burgess, A. E., & Co., Toronto, Ont.
Campbell, W. R. & S. A., Winnipeg, Man.
Capp, The T. W., Co., Toronto, Ont.
*Caron Brothers, Montreal, Que.
*Dingwall, D. R., Limited, Winnipeg, Man.
Eastwood, James, New Glasgow, N.S.
Eaves Brothers, Montreal, Que.
Ellis, Geo. E., & Co., Winnipeg, Man.
*Ellis, P. W., & Co., Limited, Toronto, Ont. (Adv. page 855.)
*Hemming Mfg. Co., Limited, Montreal, Que. (Adv. page 1013.)
*Hemsley Mfg. Co., The, Montreal, Que.
*Lees, Geo. H., & Co., Hamilton, Ont.
*Levy Bros. Co., Limited, The, Hamilton, Ont.
Montreal Watch Case Co., Limited, The, Montreal, Que.
Murphy, Bruce, Orillia, Ont.
*Roden Brothers, Toronto, Ont. (Adv. page 1048.)
Ryrie Bros., Limited, Toronto, Ont.
*Saunders, H. & A., Toronto, Ont.
Sounders, Lorie & Co., Toronto, Ont.
Smith, Patterson Co., Limited, The, Montreal, Que.
Stevenson Bros., & Baker London, Ont.
Wanless, John, & Co., Toronto, Ont.
*Zock, J. J., & Co., Limited, Toronto, Ont.

1330 JEWELRY, Enameled.

Capp, The T. W., Co., Toronto, Ont.
*Caron Bros., Montreal, Que.
*Ellis, P. W., & Co., Limited, Toronto, Ont. (Adv. page 855.)
*Hemming Mfg. Co., Limited, Montreal, Que. (Adv. page 1013.)
*Hemsley Mfg. Co., The, Montreal, Que.
*Lees, Geo. H., & Co., Limited, Hamilton, Ont.
*Roden Bros., Toronto, Ont. (Adv. page 1048.)
*Zock, J. J., & Co., Limited, Toronto, Ont.

1331 JEWELRY CASES.

See Cases, Jewelry.

1332 JEWELS, Regalia and Society.

*Bramley, William, Montreal, Que.
Capp, The T. W., Co., Toronto, Ont.
*Caron Bros., Montreal, Que.
*Dingwall, D. R., Limited, Winnipeg, Man.
*Ellis, P. W., & Co., Limited, Toronto, Ont. (Adv. page 855).
*Hemming Mfg. Co., Limited, Montreal, Que. (Adv. page 1013).
Montreal Watch Case Co., Limited, The, Montreal, Que.
Mortimore & Blackeby, Toronto, Ont.
*Saunders, H. & A., Toronto, Ont.
*Zock, J. J., & Co., Limited, Toronto, Ont.

1333 JIGS.

*Sutherland Rifle Sight Co., Limited, The, New Glasgow, N.S.
*Thompson, J., & Son, Toronto, Ont.

1334 JOINTERS, Shingle.

Williams, The Madison, Mfg. Co., Limited, Lindsay, Ont.

1335 JOINTS, Expansion, Brass and Iron.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).

1336 JUICES, Fruit.

See Syrups, Fruit.

K

1337 KALSOMINE.

Alabastine Co., Limited, The, Paris, Ont.
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027).

1338 KEGS, Paint.

Keenan Woodenware Mfg. Co., Limited, Owen Sound, Ont.

1339 KEGS, Pickle, Syrup, Etc.

Keenan Woodenware Mfg. Co., Limited, Owen Sound, Ont.
*London & Petrolia Barrel Co., The, London, Ont.

1340 KERSEY CLOTH.

See Cloth, Kersey.

1341 KETTLES, Copper and Brass.

Booth Copper Co., Limited, The, Toronto, Ont.
*Coulter, Wm., & Sons, Toronto, Ont.
Fletcher Mfg. Co., Limited, Toronto, Ont.
Kemp Mfg. Co., Toronto, Ont.

1342 KETTLES, Steam Jacket.

Mitchell, The Robert, Co., Limited, Montreal, Que.

1343 KETTLES, Tea.

Aubry, A., & Fils, Montreal, Que.
*Gurney Foundry Co., Limited, The, Toronto, Ont.

Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022).
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020).

1344 KEY BOARDS, Piano.
Morris Piano Co., Limited, The, Listowel, Ont.
*Thomas Bros., Limited, St. Thomas, Ont.

1345 KEYS, Piano.
Barthelmes, A. A., & Co., Limited, Toronto, Ont.
*Higel, The Otto, Co., Limited, Toronto, Ont.

1346 KILNS.
Sheldons, Limited, Galt, Ont.

1347 KNITTED GOODS, Woollen.
Almonte Knitting Co., Limited, Almonte, Ont.
Ballantyne, R. M., Limited, Stratford, Ont.
Beaumont, Joseph, Glen Williams, Ont.
*Eagle Knitting Co., Limited, The, Hamilton, Ont.
Forbes, R., Co., Limited, Hespeler, Ont.
*Galt Knitting Co., Limited, Galt, Ont. (Adv. page 1042).
*Hewson Woollen Mills, Limited, Amherst, N.S.
Horn Bros., Woollen Co., Limited, Lindsay, Ont.
*Kingston Hosiery Co., Limited, Kingston, Ont.
*Knittofit Mfg. Co., The, Montreal, Que.
Monarch Knitting Co., Limited, The, Dunnville, Ont.
Penmans, Limited, Paris, Ont. (Adv. page 1063.)
*Perry, G. B., Knitting Co., Hamilton, Ont.
Reliance Knitting Co., Limited, The, Toronto, Ont.
Schofield Woollen Co., Limited, The, Oshawa Ont.
Simpson, Joseph, Sons, Toronto, Ont.
Turnbull, The C., Co., of Galt, Limited, Galt, Ont.
*Universal Knitting Co., Limited, The, Toronto, Ont.
Warren Bros., St. Catharines, Ont.

1348 KNIVES, Draw.
Fowler, The Josiah, Co., Limited, St. John, N.B.
*Gilmour Bros., & Co., Montreal, Que.

1349 KNIVES, Hay.
Bedford Mfg. Co., The, Bedford, Que.
*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
*Welland Vale Mfg. Co., Limited, The, St. Catharines, Ont. (Adv. page 1040).

1350 KNIVES, Leather Splitting
Hay, The Peter, Knife Co., Limited, Galt, Ont.

1351 KNIVES, Machine.
*Disston, Henry, & Sons, Limited, Toronto, Ont.
Hay, The Peter, Knife Co., Limited, Galt, Ont.
*Simonds Canada Saw Co., Limited, St. Henri, Montreal, Que.
*St. Lawrence Saw & Steel Works Co., Limited, Sorel, Que. (Adv. page 844).
Walters, H., & Sons, Hull, Que.
*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

1352 KNIVES, Mincing.
*Cumming Mfg. Co., Limited, The Renfrew, Ont.

1353 KNIVES, Pulp.
Hay, The Peter, Knife Co., Limited, Galt, Ont.
*St. Lawrence Saw & Steel Works Co., Limited, Sorel, Que. (Adv. page 844).

1354 KNIVES, Woodworking, Paper Cutting and Veneer Cutting.
Hay, The Peter, Knife Co., Limited, Galt, Ont.
*Simonds Canada Saw Co., Limited, St. Henri, Montreal, Que.
*St. Lawrence Saw & Steel Works Co., Limited, Sorel, Que. (Adv. page 844).
Warnock, The James, Co., Limited, Galt, Ont.
*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

1355 KNOBS, Door.
Belleville Hardware Co., Limited, The, Belleville, Ont.
Canadian General Electric Co., Limited, Toronto, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
*Hahn Brass Co., Limited, The, New Hamburg, Ont.
National Hardware Co., Limited, Orillia, Ont.
Peterboro Lock Mfg. Co., Limited, The, Peterboro, Ont.

1356 KNOBS, Carriage (Steel).
*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024).

1357 KNOBS, Furniture.
*Hahn Brass Co., Limited, The, New Hamburg, Ont.

1358 KNUCKLES.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Holden, N. J., Co., Limited, Montreal, Que.

1359 KODAKS.
Canadian Kodak Co., Limited, Toronto, Ont. (Adv. page 1030).

L

1360 LABELS.
*Benallack Lithographing & Printing Co., The, Montreal, Que.
Bulman Bros., Limited, Winnipeg, Man.
Canada Tag & Label Co., Limited, Montreal, Que.
*Colonist Printing & Publishing Co., Ltd., The, Victoria, B.C.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997).
*Duncan Lithographing Co., Limited, The, Hamilton, Ont.
*Harris Lithographing Co., The, Toronto, Ont.
*Howell Lithographing Co., Hamilton, Ont.
*Lawson & Jones, Limited, London, Ont.
London Printing & Lithographing Co., London, Ont.
Long, A. E., & Co., Limited, Toronto. Ont.
*Reason, H. T., & Co., London, Ont.
*Rolph & Clark, Limited, Toronto, Ont. (Adv. page 998).
*Smith, The David, Engraving & Lithographing Co., Toronto, Ont.
Southam Printing & Lithographing Co., Limited, The, London, Ont.

1361 LABELS, Embossed Brass.
*Superior Mfg. Co., The, Toronto, Ont. (Adv. page 866).
Toronto Stamp & Stencil Works, Toronto, Ont.
Walker & Campbell, Montreal, Que.

1362 LABELS, Woven.
*Canadian Silk Co., Limited, Toronto, Ont.
*Colonial Weaving Co., Limited, The, Peterborough, Ont.

1363 LABORATORY APPARATUS.
Hendry, The Geo. M., Co., Limited, Toronto, Ont.

1364 LACES, Cotton.
*Ladies' Wear, Limited, Toronto, Ont.

1365 LACES, Shoe, Corset, Etc.
*Peters, J. Henry, Co., Toronto, Ont.

1366 LACES, Silk.
*Corticelli Silk Co., Limited, Montreal, Que.
*Rea, A. E., & Co., Limited, Toronto, Ont.

1367 LACQUERS.
*Brandram-Henderson, Limited, Montreal, Que. (Adv. page 840).
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027).
*Canadian Bronze Powder Works, The, Montreal, Que.
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845).
*International Varnish Co., Limited, Toronto, Ont. (Adv. page 859).
Jamieson, R. C., & Co., Limited, Montreal, Que.
Langmuir, James, & Co., Limited, Toronto, Ont.
*Pendray, W. J., Victoria, B.C.
*Ramsay, A., & Son Company, Montreal, Que.
*Scarfe & Co., Brantford, Ont.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.

1369 LADDERS, Extension and Firemen's.
Anglin, S., & Co., Kingston, Ont.
*Seagrave, W. E., Walkerville, Ont.

1370 LADDERS, Step.
Allith Mfg. Co., Limited, Hamilton, Ont.
*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852).
Connor, J. H., & Son, Limited, Ottawa, Ont.
Otterville Mfg. Co., Limited, Otterville, Ont.
*Shirreff Mfg. Co., Limited, Brockville, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020).
*Taylor, Scott & Co., Toronto, Ont.
*Thomas Bros., Limited, St. Thomas, Ont.

1371 LADDERS, Store Trolley.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).
*Shirreff Mfg. Co., Limited, Brockville, Ont.

1372 LADLES, Butter and Dairy
*Richardson, C., & Co., St. Mary's, Ont. (Adv. page 1063.)

1373 LAMPS, Acetylene.
Piper, The Hiram L., Co., Limited, Montreal, Que.
*Piper, The N. L., Railway Supply Co., Limited, Toronto, Ont.

1374 LAMPS, Coal Oil.
*Gowans, Kent & Co., Limited, Toronto, Ont.
Ontario Lantern & Lamp Co., Limited, Hamilton, Ont. (Adv. page 830).

1375 LAMPS, Electric Arc.
Canadian General Electric Co., Limited, Toronto, Ont.
Canadian Westinghouse Co., Limited, Hamilton, Ont.
*Forman, John, Montreal, Que.
*Pringle, The R. E. T., Co., Limited, Montreal, Que.

1376 LAMPS, Gasoline Gas.
*Auer Incandescent Light Mfg. Co., Limited, Montreal, Que.

1377 LAMPS, Incandescent Electric.
Canadian General Electric Co., Limited, Toronto, Ont.
Canadian Westinghouse Co., Limited, Hamilton, Ont.
*Forman, John, Montreal, Que.
*Munderloh & Co., Montreal, Que.
Ontario Lantern & Lamp Co., Limited, Hamilton, Ont. (Adv. page 830).
*Packard Electric Co., Limited, The, St. Catharines, Ont. (Adv. page 876.)

1378 LAMPS, Motor Car Head, Ship, Street, Train, and Switch.
Canadian General Electric Co., Limited, Toronto, Ont.
*Forman, John, Montreal, Que.
Ontario Lantern & Lamp Co., Limited, Hamilton, Ont. (Adv. page 830).
Piper, The Hiram L., Co., Limited, Montreal, Que.
*Piper, The N. L., Railway Supply Co., Limited, Toronto, Ont.

1379 LANTERNS.
Kemp Mfg. Co., Toronto, Ont.
Ontario Lantern & Lamp Co., Limited, Hamilton, Ont. (Adv. page 830).
Piper, The Hiram L., Co., Limited, Montreal, Que.
*Piper, The N. L., Railway Supply Co., Limited, Toronto, Ont.
*Wright, E. T., & Co., Hamilton, Ont.

1380 LARD.
*Canadian Packing Co., Limited, London, Ont.
*Collingwood Packing Co., Limited, Collingwood, Ont.
*Davies, The Wm., Co., Limited, Toronto, Ont.
*Davis & Fraser, Halifax, N.S.
*Fearman, F. W., Co., Limited, Hamilton, Ont.
*Fowler's Canadian Co., Limited, Hamilton, Ont..
Freeman, The W. A., Co., Limited, Hamilton, Ont.
Gallagher-Hull Meat & Packing Co., Limited, The, Edmonton, Alta.
*Ingersoll Packing Co., Limited, The, Ingersoll, Ont.
Laing Packing & Provision Co., Limited, Montreal, Que.
Lawrason, S. F., & Co., London, Ont.
*Matthews, The Geo., Co., Limited, Peterborough, Ont.
Montreal Packing Co., Limited, The, Montreal, Que.
*O'Mara, Joseph, Palmerston, Ont.
Western Packing Co. of Canada, Limited, The, Winnipeg, Man.
Whyte Packing Co., Limited, The, Stratford, Ont.

1381 LARD COMPOUND.
*Fairbank, The N. K., Co., Montreal, Que.

1382 LARRIGANS.
*Beal, R. M., Leather Co., Limited, Lindsay, Ont.
*Hudson Bay Knitting Co., The, Montreal, Que.
*Palmer, John, Co., Limited, Fredericton, N.B.
*Peters, C. H., Sons, St. John, N.B.

1383 LASHES, Whip.
*Brown, John E., Hamilton, Ont.
*Hamilton Whip Co., Hamilton, Ont.
*Lay Whip Co., Rock Island, Que.

1384 LASTS, Boot and Shoe.
*Canada Last Co., Limited, The, Toronto, Ont.
Chalifour, O., Quebec, Que.
Granby Rubber Co., Limited, The, Granby, Que.
*Lyn Last Works, Lyn, Ont.
Montreal Last Factory, Montreal, Que.

1385 LATCHES.
Allith Mfg. Co., Limited, Hamilton, Ont.
Belleville Hardware Co., Limited, The, Belleville, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
*Louden Machinery Co., Guelph, Ont.
Montreal Hardware Mfg. Co., Limited, The, Montreal, Que.
Peterborough Lock Mfg. Co., Limited, The, Peterborough, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020).
Taylor-Forbes Co., Limited, Guelph, Ont.

1386 LATH.

Andre Cushing & Co., St. John, N.B. (Adv. page 852.)
Big Bend Lumber Co., Limited, Arrowhead, B.C.
Booth, J. R., Ottawa, Ont.
Breakey, John, Chaudiere Mills, Que.
*B. C. Mills, Timber & Trading Co., Vancouver, B.C.
*Brunette Saw Mill Co., Limited, New Westminster, B.C.
*Carew, John, Lindsay, Ont.
*Canadian Pacific Lumber Co., Limited, The, Port Moody, B.C.
*Cleveland-Sarnia Saw Mills Co., Limited, The, Sarnia, Ont.
Columbia River Lumber Co., Limited, Golden, B.C.
*Conger Lumber Co., Limited, The, Toronto, Ont.
Davidson, James, Ottawa, Ont.
*Davison Lumber Co., Limited, Bridgewater, N.S.
DeCew, T. H., & Son, Bruce Mines, Ont.
*Dickie, The Alfred, Lumber Co., Limited, Stewiacke, N.S.
*Dominion Paper Co., Montreal, Que.
Dussault & Co., Levis, Que.
Elliott, James S., & Son, Prescott, Ont.
*Empire Lumber Co., Limited, Toronto, Ont.
Foster, Clement A., Haileybury, Ont.
*Georgian Bay Lumber Co., Limited, The, Waubaushene, Ont.
*Gillies Bros., Limited, Braeside, Ont.
*Gilmour Door Company, Limited, Trenton, Ont.
*Grier, G. A., & Son, Montreal, Que.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
*Heaps, E. H., & Co., Vancouver, B.C. (Adv. page 850.)
Knight Bros. Co., Limited, The, Burk's Falls, Ont.
*Laidlaw, R., Lumber Co., Limited, Toronto, Ont.
Loveland & Stone, Cutler, Ont.
*Maclaren, The James, Co., Limited, Buckingham, Que.
*McGibbon, F., & Sons, Penetanguishene, Ont.
*Metis Lumber Co., The, Price, Que.
Mossom Boyd Co., Bobcaygeon, Ont.
*Murray & Gregory, Limited, St. John, N.B.
Otis Staples Lumber Co., Wycliffe, B.C.
Oyamel Company, Quebec, Que.
Pacific Coast Lumber Mills, Limited, Vancouver, B.C.
Palliser Lumber Co., Palliser, B.C.
*Paquet & Godbout, St. Hyacinthe, Que.
*Parry Sound Lumber Co., Limited, The, Toronto, Ont. (Adv. page 1038).
Patterson-Tilley Co., The, Hamilton, Ont.
*Pigeon River Lumber Co., Port Arthur, Ont.
Playfair & White, Midland, Ont.
Quance Bros., Delhi, Ont.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
*Robertson & Hackett, Vancouver, B.C.
Robinson-McKenzie Lumber Co., Limited, Cranbrook, B.C.
Sayward, J. A., Victoria, B.C.
*Shawinigan Lake Lumber Co., Limited, The, Victoria, B.C.
Sheppard, James, & Son, Sorel, Que.
*Shives Lumber Co., Limited, Campbellton, N.B.
*Smith, John B., & Sons, Limited, Toronto, Ont.
Sprague Lumber Co., Limited, Winnipeg, Man.
*Victoria Harbor Lumber Co., Limited, Toronto, Ont.
*Victoria Lumber & Mfg. Co., Limited, Chemainus, B.C.

1387 LATH, Expended Metal.

*Expanded Metal & Fireproofing Co., Limited, Toronto, Ont. (Adv. page 1056.)
Galt Art Metal Co., Limited, The, Galt, Ont. (Adv. page 1034).

1388 LATH, Metal and Steel (Plastering).

*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999).
*Metallic Roofing Co. of Canada, Limited, The, Toronto, Ont. (Adv. pages 994 and 995).
*Pedlar Metal Roofing Co., The, Oshawa, Ont.

1389 LATH, Wire.

Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044).

1390 LATHES, Iron and Brass Working, Gap, Engine and Screw Cutting.

*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828).
Gardner, Robt., & Son, Montreal, Que. (Adv. page 1043.)
*London Machine Tool Co., Limited, The, London, Ont. (Adv. page 1016).
MacGregor, Gourlay Co., Limited, The, Galt, Ont.
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019).
*Stevens Co. of Galt, Limited, Galt, Ont. (Adv. page 1003).

1391 LATHES, Special.

*Bertram, John & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)
*Cowan & Company of Galt, Limited, Galt, Ont.
Gardner, Robt., & Son, Montreal, Que. (Adv. page 1043.)
*London Machine Tool Co., Limited, The, London, Ont. (Adv. page 1016.)
MacGregor Gourlay Co., Limited, The, Galt, Ont.
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)

1392 LATHES, Turret.

*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)
MacGregor, Gourlay Co., Limited, The, Galt, Ont.
*Stevens Co. of Galt, Limited, The, Galt, Ont. (Adv. page 1003.)
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)

1393 LATHES, Wood Turning.

*Ballantine, John, & Co., Limited, Preston, Ont.
*Clark-Demill Co., Limited, Hespeler, Ont. (Adv. page 838.)
Cowan & Company, of Galt, Limited, Galt, Ont.
MacGregor, Gourlay Co., Limited, The, Galt, Ont.

1394 LAUNCHES, Gasoline and Electric.

*Adams Launch & Engine Mfg. Co., Penetang, Ont. (Adv. page 862.)
*Canadian Gas Power & Launches, Limited, Toronto, Ont.
*Dean, Walter, Toronto, Ont.
*Gidley, H. E., & Co., Penetanguishene, Ont.
*Merchants Awning Co., Limited, Montreal, Que.
*Peterborough Canoe Co., Limited, The, Peterborough, Ont.
Schofield-Holden Machine Co., Limited, Toronto, Ont.

1395 LAUNCHES, Steam.

*Peterborough Canoe Co., Limited, The, Peterborough, Ont.

1396 LAVATORIES.

*Amherst Foundry Co., Limited, Amherst, N.S. (Adv. page 849.)
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
*Standard Ideal Co., Limited, The, Port Hope, Ont. (Adv. pages 873 and 874.)

1397 LEAD, Bullion and Pig.

Canada Metal Co., The, Toronto, Ont. (Adv. page 869.)
*Consolidated Mining & Smelting Co. of Canada, Limited, Trail, B.C. (Adv. page 1026.)
*Frankel Bros., Toronto, Ont.
*Hall Mining & Smelting Co., Limited, Nelson, B.C.
Syracuse Smelting Works, Montreal, Que.
*Tallman, J. N., & Sons, Hamilton, Ont.

1398 LEAD Concentrates.

*Consolidated Mining & Smelting Co. of Canada, Limited, Trail, B.C. (Adv. page 1026.)

1399 LEAD, Silver.

Hamilton Facing Mill Co., Limited, Hamilton, Ont.

1400 LEAD, White and Red.

*Brandram - Henderson, Limited, Montreal, Que. (Adv. page 840.)
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
Carter White Lead Co. of Canada, Limited, Montreal, Que.
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
McArthur, Corneille & Co., Montreal, Que.
*Martin Senour Co., Limited, The, Montreal, Que.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Moore, Benjamin & Co., Limited, West Toronto, Ont.
*Pendray, W. J., Victoria, B.C.
*Ramsay, A., & Son Co., Montreal, Que.
Robertson, The James, Co., Limited, Montreal, Que.

1401 LEAD, White, Ground in Oil.

*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
*Martin Senour Co., Limited, The, Montreal, Que.
*Montreal Rolling Mills Co., The, Montreal, Que. (Adv. page 842.)
Muirhead, A., Toronto, Ont.
Robertson, The James, Co., Limited, Montreal, Que.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
Stephens, G. F., & Co., Limited, Winnipeg, Man.

1402 LEAD, Window and Wedge.

Robertson, Thomas, & Co., Limited, Montreal, Que.

1403 LEAF OR FOIL, Gold.

*Wilkinson, The J. E., Co., Limited, Toronto, Ont.

1404 LEATHER, Bag, Case, Trunk and Strap.

*Barrie Tanning Co., Limited, The, Barrie, Ont. (Adv. page 1041.)
*Beardmore & Co., Toronto, Ont. (Adv. page 835.)
*Blouin, F., Quebec, Que.
*Clarke & Clarke, Limited, Toronto Ont. (Adv. page 868.)
*Great West Saddlery Co., Limited, The, Winnipeg, Man.
*Wickett & Craig, Limited, Toronto, Ont.

1405 LEATHER, Belting.

*Beardmore & Co., Toronto, Ont. (Adv. page 835.)
Goodhue, J. L., & Co., Danville, Que.
*Hamilton Oak Tanning Co., Limited, The, Hamilton, Ont.
*Sadler & Haworth, Montreal, Que. (Adv. page 1002.)

1406 LEATHER, Bookbinders'.

*Barrie Tanning Co., Limited, The, Barrie, Ont. (Adv. page 1041.)
*Beardmore & Co., Toronto, Ont. (Adv. page 835.)
Brown Bros., Limited, The, Toronto, Ont. (Adv. page 867.)
*Clarke & Clarke, Limited, Toronto, Ont. (Adv. page 868.)
*Galibert, F., Montreal, Que.
*Johnston, H. B., & Co., Toronto, Ont.
*Wickett & Craig, Limited, Toronto, Ont.

1407 LEATHER, Boot and Shoe Upper.

*Barrie Tanning Co., Limited, The, Barrie, Ont. (Adv. page 1041.)
*Beal, R. M., Leather Co., Limited, Lindsay, Ont.
*Beal Bros., Toronto, Ont. (Adv. page 868.)
*Beardmore & Co., Toronto, Ont. (Adv. page 835).
*Blouin, F., Quebec, Que.
*Blouin, J. B., & Fils, Levis, Que. (Adv. page 1006.)
*Clarke, A. R., & Co., Limited, Toronto, Ont.
*Clarke & Clarke, Limited, Toronto, Ont. (Adv. page 868.)
*Clement, Max, Quebec, Que.
*Daoust, Lalonde & Co., Montreal, Que.
*Davis Leather Co., Limited, Newmarket, Ont.
*Davis, A., & Son, Limited, Kingston, Ont.
*Duclos & Payan, St. Hyacinthe, Que.
*Fisk, Limited, Montreal, Que.
*Galibert, C., & Son Co., Montreal, Que.
*Galibert, Paul, Montreal, Que.
*Fortier, Nazaire, Quebec Que.
*Higgins, L., & Co., Moncton, N.B.
*Marlatt & Armstrong Co., Limited, The, Oakville, Ont.
*Pion, A., & Cie, Quebec, Que.
*Pouliot, J. & S., & Frere, Quebec, Que.
*Robson Leather Co., Limited, The, Oshawa, Ont.
Smith, Baggs & Heaven, Toronto, Ont.
*Welsh Tanning Co., Limited, The, Hastings, Ont.
*Wickett & Craig, Limited, Toronto, Ont.
*Wood Bros., St. Catharines, Ont.

1408 LEATHER, Carriage.

*Beardmore & Co., Toronto, Ont. (Adv. page 835.)
*Clarke & Clarke, Limited, Toronto, Ont. (Adv. page 868.)
*Marlatt & Armstrong Co., Limited, The, Oakville, Ont.
*Montreal Carriage Leather Co., Limited, Montreal, Que.
*Peters, C. H., Sons, St. John, N.B.

1409 LEATHER, Harness.

*Barrie Tanning Co., Limited, The, Barrie, Ont. (Adv. page 1041.)
*Beal, R. M., Leather Co., Limited, Lindsay, Ont.
*Beal Bros., Toronto, Ont. (Adv. page 868.)
*Beardmore & Co., Toronto, Ont. (Adv. page 835.)
*Clarke & Clarke, Limited, Toronto, Ont. (Adv. page 868.)
*Great West Saddlery Co., Limited, The, Winnipeg, Man.
Lang Tanning Co., Limited, The, Berlin, Ont.
*McQuay Tanning Co., Limited, The, Owen Sound, Ont.
*Welsh Tanning Co., Limited, The, Hastings, Ont.
*Wood Bros., St. Catharines, Ont.

1410 LEATHER, Kid.

*Beardmore & Co., Toronto, Ont. (Adv. page 835.)
*Bonner Leather Co., The, Montreal, Que.
*Clarke, A. R., & Co., Limited, Toronto, Ont.
*Clarke & Clarke, Limited, Toronto, Ont. (Adv. page 868.)
*Clement, Max, Quebec, Que.
*Duclos & Payan, St. Hyacinthe, Que.
*Fortier, Nazaire, Quebec, Que.
*Galibert, F., Montreal, Que.
*Galibert, Paul, Montreal, Que.
*Marlatt & Armstrong Co., Limited, The, Oakville, Ont.
*Pion, A., & Cie, Quebec, Que.
*Robson Leather Co., Limited, The, Oshawa, Ont.

1411 LEATHER, Lace.

*Beal Bros., Toronto, Ont. (Adv. page 868.)
*Beardmore & Co., Toronto, Ont. (Adv. page 835.)
Crescent Oil Co., The, Hamilton, Ont.
Electric Boiler Compound Co., Limited, The, Guelph, Ont.
Goodhue, J. L., & Co., Danville, Que.
Hamilton Engine Packing Co., Hamilton, Ont.
*Sadler & Haworth, Montreal, Que. (Adv. page 1002.)
*Spooner, Alonzo W., Port Hope, Ont.
*Wood Bros., St. Catharines, Ont.

1412 LEATHER, Mechanical and Hydraulic.

*Beardmore & Co., Toronto, Ont. (Adv. page 835.)
*McLaren, The J. C., Belting Co., Montreal, Que. (Adv. page 1017.)
*Sadler & Haworth, Montreal, Que. (Adv. page 1002.)

1413 LEATHER, Moccasin.

*Beardmore & Co., Toronto, Ont. (Adv. page 835.)
*Blouin, F., Quebec, Que.
*Clarke, A. R., & Co., Limited, Toronto, Ont.
*Clement, Max, Quebec, Que.
Dugal, P., & Matte, Quebec, Que.
*Fortier, Nazaire, Quebec, Que.
Paquet Co., Limited, The, Quebec, Que.
*Peters, C. H., Sons, St. John, N.B.
*Pion, A., & Cie, Quebec, Que.

1414 LEATHER, Organ and Velvet.

*Beardmore & Co., Toronto, Ont. (Adv. page 835.)
*Clarke & Clarke, Limited, Toronto, Ont. (Adv. page 868.)

1415 LEATHER, Patent and Enamel.

*Beardmore & Co., Toronto, Ont. (Adv. page 835.)
*Blouin, F., Quebec, Que.
*Clarke, A. R., & Co., Limited, Toronto, Ont.
*Davis Leather Co., Limited, Newmarket, Ont.
Dugal, P., & Matte, Quebec, Que.
*Fisk, Limited, Montreal, Que.
*Marlatt & Armstrong Co., Limited, The, Oakville, Ont.
*Montreal Carriage Leather Co., Limited, Montreal, Que.
*Peters Sons, C. H., St. John, N.B.

1416 LEATHER, Picker.

*Beardmore & Co., Toronto, Ont. (Adv. page 835.)
Goodhue, J. L., & Co., Danville, Que.
*McLaren, The J. C., Belting Co., Limited, Montreal, Que. (Adv. page 1017.)
*Sadler & Haworth, Montreal, Que. (Adv. page 1002.)

1417 LEATHER, Saddlers'.

*Barrie Tanning Co., Limited, The, Barrie, Ont. (Adv. page 1041.)
*Beal Bros., Toronto, Ont. (Adv. page 868.)
*Beardmore & Co., Toronto, Ont. (Adv. page 835.)
*Clarke & Clarke, Limited, Toronto, Ont. (Adv. page 868.)
*Great West Saddlery Co., Limited, Winnipeg, Man.
*Marlatt & Armstrong Co., Limited, The, Oakville, Ont.
*Peters Sons, C. H., St. John, N.B.
*Wickett & Craig, Limited, Toronto, Ont.

1418 LEATHER, Sheepskin.

*Clarke & Clarke, Limited, Toronto, Ont. (Adv. page 868.)
*Johnston, H. B., & Co., Toronto, Ont.
*Pion, A., & Cie, Quebec, Que.
Turgeon, Elie, Quebec, Que.

1419 LEATHER, Sole.

*Anglo-Canadian Leather Co., Limited, Montreal, Que.
*Beardmore & Co., Toronto, Ont. (Adv. page 835.)
*Blouin, F., Quebec, Que.
*Breithaupt Leather Co., Limited, The, Berlin, Ont.
*Clement, Max, Quebec, Que.
*Duclos & Payan, St. Hyacinthe, Que.
*Hamilton Oak Tanning Co., Limited, The, Hamilton, Ont.
*Marlatt & Armstrong Co., Limited, The, Oakville, Ont.
Smith, Baggs & Heaven, Toronto, Ont.

1420 LEATHER, Upholsterers'.

*Beardmore & Co., Toronto, Ont. (Adv. page 835.)
*Clarke & Clarke, Limited, Toronto, Ont. (Adv. page 868).
*Marlatt & Armstrong Co., Limited, The, Oakville, Ont.
*Montreal Carriage Leather Co., Limited, Montreal, Que.
*Peters Sons, C. H., St. John, N.B.
*Wickett & Craig, Limited, Toronto, Ont.

1421 LEATHER, Valve.

*Beardmore & Co., Toronto, Ont. (Adv. page 835).
Goodhue, J. L., & Co., Danville, Que.
*McLaren, The J. C., Belting Co., Montreal, Que. (Adv. page 1017.)
*Sadler & Haworth, Montreal, Que. (Adv. page 1002.)

1422 LEATHER GOODS, Fancy.

Brown Bros., Limited, The, Toronto, Ont. (Adv. page 867.)
Canada Leather Goods Co., Montreal, Que.
Copp, Clark Co., Limited, The, Toronto, Ont.
*General Leather Goods, Limited, Toronto, Ont.
*Great West Saddlery Co., Limited, The, Winnipeg, Man.
Kelly's, Limited, Halifax, N.S.
Sale, The Julian, Leather Goods Co., Limited, Toronto, Ont.
*Toronto Lithographing Co., Limited, The, Toronto, Ont.
Trunk & Leather Goods Co., Toronto, Ont.
*Western Leather Goods Co., Limited, The, Toronto, Ont.
*Young Bros., Toronto, Ont.

1423 LEDGERS, Card.

*Library Bureau of Canada, Limited, Ottawa, Ont. (Adv. page 848.)
Office Specialty Mfg. Co., Limited, Toronto, Ont.

1424 LEDGERS, Loose Leaf.

See Systems, loose leaf.

1425 LEGGINGS, Leather and Cloth.

*Beal, R. M., Leather Co., Limited, Lindsay, Ont.
*Beal Bros., Toronto, Ont. (Adv. page 868.)
Kelly's Limited, Halifax, N.S.
*Packard, L. H., & Co., Limited, Montreal, Que.

1426 LENSES, Spectacle and Opera Glass.

*Consolidated Optical Co., Limited, The, Toronto, Ont.

1427 LETTERS, Brass.

*Martel Stewart Co., Limited, The, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

1428 LETTERS, Steel Die.

*Montreal Stencil Works, Montreal, Que. (Adv. page 1032.)
*Patterson & Heward, Toronto, Ont.
*Superior Mfg. Co., The, Toronto, Ont. (Adv. page 866.)

1429 LETTERS, Window, in Enamel, Brilliant, Aluminum, etc.

*Martel Stewart Co., Limited, The, Montreal, Que.

1430 LIFE PRESERVERS.

See Preservers, life.

1431 LIGHTS, Head.

See Headlights (engine and electric car).

1432 LIGHTERS, Cigar, Electric.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

1433 LIGHTHOUSES.

Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)

1434 LIGHTS, Search.

Canadian General Electric Co., Limited, Toronto, Ont.
Piper, The Hiram L., Co., Limited, Montreal, Que.
*Piper, The N. L., Railway Supply Co., Limited, Toronto, Ont.
*Siche Gas Co., Limited, The, Toronto, Ont.

1435 LIGHTS, Sidewalk Prism.

See Prisms, window and sidewalk.

1436 LIME.

Maloney, John, & Co., Toronto, Ont.
Ontario Lime Association, Toronto, Ont.
Robertson, D., & Co., Toronto, Ont. (Adv. page 1035.)
*Winnipeg Supply Co., Limited, The, Winnipeg, Man.

1437 LIME, Acetate of.

Algoma Steel Co., Limited, The, Sault Ste. Marie, Ont. (Adv. page 1059.)
Canada Chemical Mfg. Co., Limited, The, London, Ont.
Ontario Lime Association, Toronto, Ont.
*Standard Chemical Co. of Toronto, Limited, The, Toronto, Ont. (Adv. page 1032.)
*Wood Products Co. of Canada, Limited, Toronto, Ont.

1438 LIME JUICE.

*National Drug & Chemical Co. of Canada, Limited, Montreal, Que.

1439 LIMESTONE, Dolomite, for Fluxing.

Doolittle & Wilcox, Limited, Dundas, Ont.

1440 LINES, Clothes, Chalk, Awning.

Doon Twine & Cordage Co., Limited, The, Doon, Ont.
Hamilton Cotton Co., Hamilton, Ont. (Adv. page 870.)
Shurly & Derrett, Limited, Toronto, Ont. (Adv. page 845.)

1441 LINES, Clothes (Wire).

*Dominion Wire Rope Co., Limited, Montreal, Que. (Adv. page 1026.)
Western Wire & Nail Co., Limited, The, London, Ont.

1442 LINES, Fishing.

*Corticelli Silk Co., Limited, Montreal, Que.
Shurly & Derrett, Limited, Toronto, Ont. (Adv. page 845.)

1443 LINES, Plow.

Doon Twine & Cordage Co., Limited, The, Doon, Ont.
Shurly & Derrett, Limited, Toronto, Ont. (Adv. page 845.)

1444 LININGS, Blanket, Glove, Coat, Robe, etc.

*Galt Knitting Co., Limited, Galt, Ont. (Adv. page 1042.)
Glen Woollen Mills, Limited, Glen Williams, Ont.
*Montreal Woollen Mill Co., The, Montreal, Que.
*Newlands & Co., Galt, Ont.
Slingsby Mfg. Co., Limited, The, Brantford, Ont.

1445 LININGS, Carpet.

Ford, Jos., & Co., Portneuf Station, Que.
Lazier Paper Mills, Limited, Belleville, Ont.
*McArthur, Alex., & Co., Limited, Montreal, Que. (Adv. page 1040.)
*Montreal Paper Co., St. Basile, Que.
Montreal Quilting Co., Limited, The, Montreal, Que.

1446 LININGS, Coffin and Casket.

*Girard & Godin, Three Rivers, Que.
*Globe Casket Co., The, London, Ont.
*National Casket Co., Toronto, Ont.
Thompson, The D. W., Co., Limited, Toronto, Ont.

1447 LININGS, Cotton.

*Dominion Textile Co., Limited, Montreal, Que.
Montreal Cotton Co., Valleyfield Que.

1448 LININGS, Fancy Quilted, Silk, etc.

Montreal Quilting Co., Limited, The, Montreal, Que.

1449 LININGS, Flue, Stove and Range.

Campbell's Sons, R., Hamilton, Ont.
Dominion Sewer Pipe Co., Limited, The, Swansea, Ont. (Adv. page 1035.)
Hamilton & Toronto Sewer Pipe Co., Limited, The, Hamilton, Ont.
Montreal Fire Brick Works, The, Montreal, Que.
*Moore, Benjamin, & Co., Limited, West Toronto, Ont.
Ontario Sewer Pipe Co., Limited, The, Mimico, Ont.
*Standard Drain Pipe Co., Limited, The, St. Johns, Que. (Adv. page 854.)
*Sterne, G. F., & Sons, Brantford, Ont.

1450 LININGS, Shoe.

*Dominion Textile Co., Limited, Montreal, Que.
*Galt Knitting Co., Limited, Galt, Ont. (Adv. page 1042.)
*Johnston, H. B., & Co., Toronto, Ont.
*Newlands & Co., Galt, Ont.

1451 LININGS, Silk.

*Corticelli Silk Co., Limited, Montreal, Que.

1452 LINOLEUM.

Dominion Oil Cloth Co., Limited, The, Montreal, Que.

1453 LINSEED CAKES.

See Oil Cake, linseed.

1454 LIQUIDS, Bronzing.

*Canadian Bronze Powder Works, Montreal, Que.

1455 LIQUOR, Nitrate Iron.

Cowan, John, Co., Limited, Montreal, Que.
Standard Chemical Co., Limited, The, Toronto, Ont. (Adv. page 1032.)

1456 LITHOGRAMS.

Auld Mucilage Co., Montreal, Que.

1457 LITHOGRAPHERS.

*American Bank Note Co., Ottawa, Ont.
*Alexander & Cable Lithographing Co., Toronto, Ont.
*Benallack Lithographing & Printing Co., The, Montreal, Que.
Bulman Bros., Limited, Winnipeg, Man.
*Colonist Printing & Publishing Co., Limited, The, Victoria, B.C.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
Copp, Clark Co., Limited, The, Toronto, Ont.
Davis & Henderson, Toronto, Ont.
Dawson, Chas. F., Limited, Montreal, Que.
*Duncan Lithographing Co., Limited, The, Hamilton, Ont.
Gilmour & Kearns, Montreal, Que.
*Harris Lithographing Co., The, Toronto, Ont.
Hart & Riddell, Toronto, Ont.
*Howell Lithographing Co., Hamilton, Ont.
*Knowles & Co., London, Ont.
*Lawson & Jones, Limited, London, Ont.
London Printing & Lithographing Co., The, London, Ont.
*McAlpine Publishing Co., Limited, Halifax, N.S.
*Montreal Lithographing Co., Limited, The, Montreal, Que. (Adv. page 855.)
Mortimer Co., Limited, The, Ottawa, Ont.
*Reason, H. T., & Co., London, Ont.
*Rolph & Clark, Limited, Toronto, Ont. (Adv. page 998.)
*Smith, The David, Engraving & Lithographing Co., Toronto, Ont.
Southam Printing & Lithographing Co., Limited, London, Ont.

Stovel Co., The, Winnipeg, Man.
*Toronto Lithographing Co., Limited, The, Toronto, Ont.

1458 LOADERS, Hay.

Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.
*Cossitt Co., Limited, The, Brockville, Ont.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Maxwell, David, & Sons, St. Mary's, Ont.
New Hamburg Mfg. Co., Limited, The, New Hamburg, Ont.
Shantz, P. E., Preston, Ont.

1459 LOBSTERS, Canned.

*Prowse & Sons, Murray Harbor, P.E.I.

1460 LOCKERS, Metal.

Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)

1461 LOCKS, Dead, Mortise, Cylinder, Door, etc.

Belleville Hardware Co., Limited, The, Belleville, Ont.
*Gurney, Tilden Co., Limited The, The, Hamilton, Ont.
Mitchell, The Robert, Co., Limited, Montreal, Que.
National Hardware Co., Limited, Orillia, Ont.
Peterborough Lock Mfg. Co., Limited, The, Peterborough, Ont.
*Schmidt & Co., Winnipeg, Man.

1462 LOCKS, Sash.

Belleville Hardware Co., Limited, The, Belleville, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Mitchell, The Robt., Co., Limited, Montreal, Que.
National Hardware Co., Limited, Orillia, Ont.
Peterborough Lock Mfg. Co., Limited, The, Peterborough, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

1463 LOCOMOTIVES.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Locomotive Co., Limited, Kingston, Ont.
Canadian Westinghouse Co., Limited, Hamilton, Ont.
Fleming, James, St. John, N.B.
*Montreal Locomotive Works, Limited, Montreal, Que.

1464 LOGS, Gas.

Campbell's Sons, R., Hamilton, Ont.

1465 LORRIES, Spring.

Adams Wagon Co., Limited, Brantford, Ont.
*Bain Wagon Co., Limited, The, Woodstock, Ont.
Chatham Wagon Co., Limited, The, Chatham, Ont.
Crossen Car Mfg. Co., of Cobourg, Limited, The, Cobourg, Ont.
*Jennings, A., & Co., Montreal, Que.
*Petrolia Wagon Co., Limited, Petrolia, Ont.
Smith Bros., Toronto, Ont.
West Lorne Wagon Co., Limited, West Lorne, Ont.
Woodstock Wagon & Mfg. Co., Limited, The, Woodstock, Ont.

1466 LOUNGES.

See Couches.

1467 LUBRICATORS, Steam and Oil.

*Cuthbert, W. R., & Co., Montreal, Que.
*Hamilton Brass Mfg. Co., Limited, The, Hamilton, Ont.
*McAvity, T., & Sons, St. John, N.B.
Mitchell, The Robt., Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Penberthy Injector Co., Limited, Windsor, Ont. (Adv. page 865).

1468 LUMBER, Asbestos.

*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)

1469 LUMBER, Ash, Basswood, Elm, Balsam, Tamarac, or Hemlock.

*Andre Cushing & Co., St. John, N.B. (Adv. page 852.)
Boyd, The Mossom, Co., Bobcaygeon, Ont.
*Brennen, The M., & Sons, Mfg. Co., Hamilton, Ont.
Brockville Lumber Co., Limited, The, Brockville, Ont.
*Burrill Lumber Co., The, Shawinigan Falls, Que.
*Canada Wood Specialty Co., Limited, The, Orillia, Ont.
*Carew, John, Lindsay, Ont.
*Charlemagne & Lac Ouareau Lumber Co., The, Montreal, Que.
*Crawford, W. C., Tilbury, Ont.
*Conger Lumber Co., Limited, The, Toronto, Ont.
Crown Lumber Co., Limited, The, Woodstock, Ont.
*Davison Lumber Co., Limited, Bridgewater, N.S.
DeCew, T. H., & Son, Bruce Mines, Ont.
*Dickie, The Alfred, Lumber Co., Limited, Stewiacke, N.S.
*Dominion Paper Co., Montreal, Que.
Dyment Baker Lumber Co., The, London, Ont.
*Empire Lumber Co., Limited, Toronto, Ont.
Foster, Clement A., Haileybury, Ont.
*Gillies Bros., Limited, Braeside, Ont.
*Gordon, Geo., & Co., Cache Bay, Ont.
*Harrison, John, & Sons, Co., Limited, Owen Sound, Ont.
Irwin, R. U., & Son, Horning's Mills, Ont.
*Keenan Bros., Limited, Owen Sound, Ont.
Kerr, J. & J., Co., Limited, Petrolia, Ont.
*Knechtel Furniture Co., Limited, The, Hanover, Ont.
Knight Bros. Co., Limited, The, Burk's Falls, Ont.
*Laidlaw, R., Lumber Co., Limited, Toronto, Ont.
*Laurentide Paper Co., Limited, The, Grand Mere, Que.
Likely, Jos. A., St. John, N.B.
*Loveland & Stone, Cutler, Ont.
*Maclaren, The James, Co., Limited, Buckingham, Que.
McGibbon, F., & Sons, Penetanguishene, Ont.
Mineral Range Iron Mining Co., Limited, The, Bessemer, Ont.
*Parry Sound Lumber Co., Limited, The, Toronto, Ont. (Adv. page 1038.)
*Pearce Co., Limited, The, Marmora, Ont.
Porto Rico Lumber Co., Limited, Nelson, B.C.
*Quance Bros., Delhi, Ont.
Ransford, John, Clinton, Ont.
Rathbun Co., The, Deseronto, Ont.
Robinson-McKenzie Lumber Co., Limited, Cranbrook, B.C.
Rutherford, The Wm., & Sons Co., Montreal, Que.
Saginaw Lumber & Salt Co., Sandwich, Ont.
*Scott, A. A., McGregor, Ont.
*Seaman, Kent Co., Limited, The, Meaford, Ont.
*Sharples, W. J., Quebec, Que.
Sheppard, James, & Son, Sorel, Que.
*Smith, John B., & Sons, Limited, Toronto, Ont.
*Sutherland, Innes Co., Limited, The, Chatham, Ont. (Adv. page 856.)
Tourville Lumber Mills Co., The, Montreal, Que.
*Turner Lumber & Pulp Wood Co., Quebec, Que.
Wilson Bros., Limited, Collingwood, Ont.
Woodstock Lumber & Mfg. Co., Limited, The, Woodstock, Ont.
Yale Columbia Lumber Co., Limited, Nakusp, B.C.

1470 LUMBER, Cedar.

Big Bend Lumber Co., Limited, Arrowhead, B.C.
*B. C. Mills, Timber & Trading Co., Vancouver, B.C.
Boyd, The Mossom, Co., Bobcaygeon, Ont.
*Brunette Saw Mill Co., Limited, New Westminster, B.C.
Columbia River Lumber Co., Limited, Golden, B.C.
Cowichan Lumber Co., Limited, The, Bobcaygeon, Ont.
Foster, Clement A., Haileybury, Ont.
Hastings Shingle Mfg. Co., Limited, Vancouver, B.C.
*Heaps, E. H., & Co., Vancouver, B.C. (Adv. page 850.)
*Keenan Bros., Limited, Owen Sound, Ont.
Kerr, J. & J., Co., Limited, Petrolia, Ont.
Leigh, James, & Sons, Victoria, B.C.
Lemon, Gonnason & Co., Victoria, B.C.
*Maclaren, The James, Co., Limited, Buckingham, Que.
*Metis Lumber Co., The, Price, Que.
*Murray & Gregory, Limited, St. John, N.B.
Mineral Range Iron Mining Co., Limited, The, Bessemer, Ont.
*North Pacific Lumber Co., Limited, Barnet, B.C.
Pacific Coast Lumber Mills, Limited, Vancouver, B.C.
Porto Rico Lumber Co., Limited, Nelson, B.C.
Rat Portage Lumber Co., Limited, The, Kenora, Ont.
*Robertson & Hackett, Vancouver, B.C.
Rousseau, J. A., Ste. Anne de la Perade, Que.
*Sayward, J. A., Victoria, B.C.
Shawinigan Lake Lumber Co., Limited, The, Victoria, B.C.
Sprague Lumber Co., Limited, Winnipeg, Man.
*Terminal Lumber & Shingle Co., Limited, The, Vancouver, B.C.
Trenholme, T. A., Montreal, Que.
*Victoria Harbor Lumber Co., Limited, Toronto, Ont.
*Victoria Lumber & Mfg. Co., Limited, Chemainus, B.C.
Yale Columbia Lumber Co., Limited, Nakusp, B.C.

1471 LUMBER, Douglas Fir.

Armstrong Saw Mill, Armstrong, B.C.
*B. C. Mills, Timber & Trading Co., Vancouver, B.C.
Boyd, The Mossom Co., Bobcaygeon, Ont.
*Brunette Saw Mill Co., Limited, New Westminster, B.C.
Brockville Lumber Co., Limited, The, Bobcaygeon, Ont.
Columbia River Lumber Co., Limited, Golden, B.C.
Cowichan Lumber Co., Limited, The, Bobcaygeon, Ont.
East Kootenay Lumber Co., Limited, Cranbrook, B.C.
Hastings Shingle Mfg. Co., Limited, Vancouver, B.C.
*Heaps, E. H., & Co., Vancouver, B.C. (Adv. page 850.)
Kerr, J. & J., Co., Limited, Petrolia, Ont.
*Laidlaw, R., Lumber Co., Limited, Toronto, Ont.
Lemon, Gonnason & Co., Victoria, B.C.
Leigh, James, & Sons, Victoria, B. C.
*Mason, Gordon & Co., Montreal, Que.
*North Pacific Lumber Co., Limited, Barnet, B.C.
Pacific Coast Lumber Mills, Limited, Vancouver, B.C.
Rat Portage Lumber Co., Limited, The, Kenora, Ont.
*Robertson & Hackett, Vancouver, B.C.
Robinson-McKenzie Lumber Co., Limited, Cranbrook, B.C.
*Sayward, J. A., Victoria, B.C.
Shawinigan Lake Lumber Co., Limited, The, Victoria, B.C.
Sprague Lumber Co., Limited, Winnipeg, Man.
*Terminal Lumber & Shingle Co., Limited, The, Vancouver, B.C.
*Victoria Lumber & Mfg. Co., Limited, Chemainus, B.C.

1472 LUMBER, Hardwood (Beech, Birch or Maple).

*Brennen, The M., & Sons Mfg. Co., Hamilton, Ont.
Booth, J. R., Ottawa, Ont.
Brockville Lumber Co., Limited, The, Brockville, Ont.
*Canada Wood Specialty Co., Limited, The, Orillia, Ont.
*Carew, John, Lindsay, Ont.
*Columbia Handle & Lumber Co., The, London, Ont.
DeCew, T. H., & Son, Bruce Mines, Ont.
*Dickie, The Alfred, Lumber Co., Limited, Stewiacke, N.S.
*Dominion Paper Co., Montreal, Que.
Gignac, Beland & Cie, Quebec, Que.
Gignac, J. H., Limited, Quebec, Que.
*Gordon, Geo., & Co., Cache Bay, Ont.
*Gravel, The A., Lumber Co., Limited, Etchemin Bridge, Que.
*Grier, G. A., & Son, Montreal, Que.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
Hadley, The S., Lumber Co., Limited, Chatham, Ont.
Irwin, R. U., & Son, Horning's Mills, Ont.
*Keenan Bros., Limited, Owen Sound, Ont.
Kerr, J. & J., Co., Limited, Petrolia, Ont.
*Knechtel Furniture Co., Limited, The, Hanover, Ont.
Knight Bros. Co., Limited, The, Burk's Falls, Ont.
*Laidlaw, R., Lumber Co., Limited, Toronto, Ont.
Likely, Joseph A., St. John, N. B.
*Loveland & Stone, Cutler, Ont.
Mineral Range Iron Mining Co., Limited, The, Besemer, Ont.
*Murray & Gregory, Limited, St. John, N.B.
Pearce Co., Limited, The, Marmora, Ont.
*Quance Bros., Delhi, Ont.
Ransford, John, Clinton, Ont.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Samson, Joseph, Quebec, Que.
*Scott, A. A., McGregor, Ont.
*Seaman, Kent Co., Limited, The, Meaford, Ont.
*Sharples, W. & J., Quebec, Que.
*Smith, John B., & Sons, Limited, Toronto, Ont.
Stewart, Robert, Limited, Guelph, Ont.
*Sutherland, Innes Co., Limited, The, Chatham, Ont. (Adv. page 856.)
*Turner Lumber & Pulp Wood Co., Quebec, Que.
Wilson Bros., Limited, Collingwood, Ont.
Woodstock Lumber & Mfg. Co., Limited, The, Woodstock, Ont.

1473 LUMBER, Interior Finish.

See Mills, Planing or Fittings, wood, etc.

1474 LUMBER, Oak and Butternut.

Crown Lumber Co., Limited, The, Woodstock, Ont.
*Keenan Bros., Limited, Owen Sound, Ont.
*Laidlaw, R., Lumber Co., Limited, Toronto, Ont.
Likely, Joseph A., St. John, N.B.
*Mason, Gordon & Co., Montreal, Que.
*Scott, A. A., McGregor, Ont.
*Sutherland, Innes Co., Limited, The, Chatham, Ont. (Adv. page 856.)
Woodstock Lumber & Mfg. Co., Limited, The, Woodstock, Ont.

1475 LUMBER, Pine.

*Andre Cushing & Co., St. John, N.B. (Adv. page 852.)
Armstrong Saw Mill, Armstrong, B.C.
Big Bend Lumber Co., Limited, Arrowhead, B.C.
Booth, J. R., Ottawa, Ont.
Boyd, The Mossom, Co., Bobcaygeon, Ont.
Breakey, John, Chaudiere Mills, Que.
*Brennen, The M., & Sons Mfg. Co., Hamilton, Ont.

Brockville Lumber Co., Limited, Brockville, Ont.
*Burrill Lumber Co., The, Shawinigan Falls, Que.
*Carew, John, Lindsay, Ont.
*Charlemagne & Lac Ouareau Lumber Co., The, Montreal, Que.
*Conger Lumber Co., Limited, The, Toronto, Ont.
Chalifour, O., Quebec, Que.
*Cleveland-Sarnia Saw Mills Co., Limited, The, Sarnia, Ont.
Columbia River Lumber Co., Limited, The, Golden, B.C.
*Davison Lumber Co., Limited, Bridgewater, N.S.
*Dickie, The Alfred, Lumber Co., Limited, Stewiacke, N.S.
*Dominion Paper Co., Montreal, Que.
Dyment-Baker Lumber Co., The, London, Ont.
East Kootenay Lumber Co., Limited, Cranbrook, B.C.
*Empire Lumber Co., Limited, Toronto, Ont.
*Firstbrook Box Co., Limited, The, Toronto, Ont.
Foster, Clement A., Haileybury, Ont.
*Georgian Bay Lumber Co., Limited, The, Waubaushene, Ont.
Gignac, J. H., Limited, Quebec, Que.
*Gillies Bros., Limited, Braeside, Ont.
*Gordon, Geo., & Co., Cache Bay, Ont.
*Gravel, The A., Lumber Co., Limited, Etchemin Bridge, Que.
*Grier, G. A., & Son, Montreal, Que.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
Hadley, The S., Lumber Co., Limited, Chatham, Ont.
Kerr, J. & J., Co., Limited, Petrolia, Ont.
*Laidlaw, R., Lumber Co., Limited, Toronto, Ont.
*Laurentide Paper Co., Limited, The, Grand Mere, Que.
Leigh, James, & Sons, Victoria, B.C.
Likely, Joseph A., St. John, N.B.
*Loveland & Stone, Cutler, Ont.
*Maclaren, The James, Co., Limited, Buckingham, Que.
*Mason, Gordon & Co., Montreal, Que.
McGibbon, F., & Sons, Penetanguishene, Ont.
Mineral Range Iron Mining Co., Limited, The, Bessemer, Ont.
*Murray & Gregory, Limited, St. John, N.B.
Otis Staples Lumber Co., Wycliffe, B.C.
*Parry Sound Lumber Co., Limited, Toronto, Ont. (Adv. page 1038.)
Pearce Co., Limited, The, Marmora, Ont.
*Pigeon River Lumber Co., Port Arthur, Ont.
Playfair & White, Midland, Ont.
Porto Rico Lumber Co., Limited, Nelson, B.C.
Rathbun Co., The, Deseronto, Ont.
Rat Portage Lumber Co., Limited, The, Kenora, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Robinson-McKenzie Lumber Co., Limited, Cranbrook, B.C.
*Rood & McGregor, New Glasgow, N.S.
Rutherford, The Wm., & Sons Co., Montreal, Que.
Rousseau, J. A., Ste. Anne de la Perade, Que.
Saginaw Lumber & Salt Co., Sandwich, Ont.
*Sharples, W. & J., Quebec, Que.
Shawinigan Lake Lumber Co., Limited, The, Victoria, B.C.
Sheppard, James, & Son, Sorel, Que.
*Shives Lumber Co., Limited, Campbellton, N.B.
*Smith, John B., & Sons, Limited, Toronto, Ont.
Sprague Lumber Co., Limited, Winnipeg, Man.
Tourville Lumber Mills Co., Montreal, Que.
Tremblay, Samuel, Chateau Richer, Que.
*Turner Lumber & Pulp Wood Co., Quebec, Que.
*Victoria Harbor Lumber Co., Limited, Toronto, Ont.
*Victoria Lumber & Mfg. Co., Limited, Chemainus, B.C.
Wilson Bros., Limited, Collingwood, Ont.
Woodstock Lumber & Mfg. Co., Limited, The, Woodstock, Ont.
Yale Columbia Lumber Co., Limited, Nakusp, B.C.

1476 LUMBER, Spruce.

*Andre Cushing & Co., St. John, N.B. (Adv. page 852.)
Booth, J. R., Ottawa, Ont.
Breakey, John, Chaudiere Mills, Que.
British Columbia Canning Co., Limited, Victoria, B.C.
Brockville Lumber Co., Limited, The, Brockville, Ont.
*Brunette Saw Mill Co., Limited, New Westminster, B.C.
*Burrill Lumber Co., The, Shawinigan Falls, Que.
*Canada Wood Specialty Co., Limited, The, Orillia, Ont.
*Carew, John, Lindsay, Ont.
Chalifour, O., Quebec, Que.
*Davison Lumber Co., Limited, Bridgewater, N.S.
*Dickie, The Alfred, Lumber Co., Limited, Stewiacke, N.S.
*Dominion Paper Co., Montreal, Que.
Dyment-Baker Lumber Co., The, London, Ont.
*Charlemagne & Lac Ouareau Lumber Co., The, Montreal, Que.
*Empire Lumber Co., Limited, Toronto, Ont.
Foster, Clement A., Haileybury, Ont.
Gignac, J. H., Limited, Quebec, Que.
*Gillies Bros., Limited, Braeside, Ont.
*Gordon, Geo., & Co., Cache Bay, Ont.
*Gravel, The A., Lumber Co., Limited, Etchemin Bridge, Que.
*Grier, G. A., & Son, Montreal, Que.
Hanbury Mfg. Co., The, Brandon, Man.
*Harrison, John, & Sons, Co., Limited, Owen Sound, Ont.
Hastings Shingle Mfg. Co., Limited, The, Vancouver, B.C.
*Heaps, E. H., & Co., Vancouver, B.C. (Adv. page 850.)
Jonquiere Pulp Co., Jonquiere, Que.
*Kaine, John C., Quebec, Que.
Kerr, J. & J., Co., Limited, Petrolia, Ont.
Knight Bros. Co., Limited, The, Burk's Falls, Ont.
*Laidlaw, R., Lumber Co., Limited, Toronto, Ont.
Lake Megantic Pulp Co., Lake Megantic, Que.
*Laurentide Paper Co., Limited, The, Grand Mere, Que.
Leigh, James, & Sons, Victoria, B.C.
Lemon, Gonnason & Co., Victoria, B.C.
*Loveland & Stone, Cutler, Ont.
McGibbon, F., & Sons, Penetanguishene, Ont.
*Murray & Gregory, Limited, St. John, N.B.
*Maclaren, The James, Co., Limited, Buckingham, Que.
*Metis Lumber Co., The, Price, Que.
Mineral Iron Mining Co., Limited, The, Bessemer, Ont.
*North Shore Power, Railway & Navigation Co., Quebec, Que.
Oyamel Co., Quebec, Que.
Pacific Coast Lumber Mills, Limited, Vancouver, B.C.
Palliser Lumber Co., Palliser, B.C.
Pauze, The U., & Fils Co., Montreal, Que.
*Price Bros. & Co., Limited, Quebec, Que.
Rathbun Co., The, Deseronto, Ont.
Rat Portage Lumber Co., Limited, The, Kenora, Ont.
Rhodes, Curry & Co., Limited, Amherst, N. S.
*Robertson & Hackett, Vancouver, B.C.
Robinson-McKenzie Lumber Co., Limited, Cranbrook, B.C.
*Rood & McGregor, New Glasgow, N.S.
Rousseau, J. A., Ste. Anne de la Perade, Que.
Rutherford, The Wm., & Sons Co., Montreal, Que.
Samson, Joseph, Quebec, Que.
*Sayward, J. A., Victoria, B.C.
*Sharples, W. & J., Quebec, Que.
Sheppard, James, & Son, Sorel, Que.
*Shives Lumber Co., Limited, Campbellton, N.B.
*Smith, John B., & Sons, Limited, Toronto, Ont.
Sprague Lumber Co., Limited, Winnipeg, Man.
*Terminal Lumber & Shingle Co., Limited, The, Vancouver, B.C.
Tremblay, Samuel, Chateau Richer, Que.
Trenholme, T. A., Montreal, Que.
*Turner Lumber & Pulp Wood Co., Quebec, Que.
Wilson Bros., Limited, Collingwood, Ont.

1477 LUMBER, Veneered.

See Veneers.

1478 LUMBER AND TIMBER, Fireproofed.

Electric Fire-Proofing Co., of Canada, Limited, The, Montreal, Que.

1479 LUXFER PRISMS.

See Prisms, window and sidewalk.

1480 LYE, Concentrated.

Darling & Brady, Montreal, Que.
*Gillett, E. W., Co., Limited, Toronto, Ont.
Richards Pure Soap Co., Limited, The, Woodstock, Ont.
*Royal Crown, Limited, The, Winnipeg, Man.

M

1481 MACARONI AND VERMICELLI.

Catelli, C. H., Montreal, Que.

1482 MACHINERY, Abattoir.

Linde British Refrigeration Co., Limited, The, Montreal, Que. (Adv. page 867.)
*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863.)
*Whitfield, The John, Co., Toronto, Ont.

1483 MACHINERY, Bakers' and Confectioners'.

*Baker, Joseph, & Sons, Limited, Brantford, Ont.
Booth Copper Co., Limited, The, Toronto, Ont.
Fletcher Mfg. Co., Limited, Toronto, Ont.
Gardner, Robt., & Son, Montreal, Que. (Adv. page 1043.)
Macnab & Roberts, Limited, Winnipeg, Man.
*Shirreff Mfg. Co., Limited, Brockville, Ont.

1484 MACHINERY, Bending.

*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)
*Clark-Demill Co., Limited, Hespeler, Ont. (Adv. page 838.)

1485 MACHINERY, Blacksmiths'.

Canadian Buffalo Forge Co., Limited, Montreal, Que.

1486 MACHINERY, Bolt and Nut, Pipe Cutting and Threading.

Armstrong, Mervin, Toronto, Ont.
*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828).
*London Machine Tool Co., Limited, The, Hamilton, Ont. (Adv. page 1016).
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019).
*Shantz, I. E., & Co., Berlin, Ont.

1487 MACHINERY, Bookbinders'.

Gardner, Robt., & Son, Montreal, Que. (Adv. page 1043.)
*Miller & Richard, Toronto, Ont.

1488 MACHINERY, Bottle Washing.

Aluminum & Crown Stopper Co., Toronto, Ont.

1489 MACHINERY, Bottling.

Aluminum & Crown Stopper Co., Toronto, Ont.
Freyseng Cork Co., Limited, Toronto, Ont.
*McLaughlin, J. J., Limited, Toronto, Ont.
Morrison, The, James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).

1490 MACHINERY, Brick, Tile and Clay.

Baird, H. C., Son & Co., Parkhill, Ont.
*Bechtels, Limited, Waterloo, Ont.
*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
*Doig, A. E., & Co., Toronto, Ont.
*Paquet & Godbout, St. Hyacinthe, Que.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861).

1491 MACHINERY, Butter and Cheese Factory.

Plessisville, La Fonderie de, Plessisville, Que.
*Richardson, C., & Co., St. Mary's, Ont. (Adv. page 1063.)
*Wortman & Ward Co., Limited, The, London, Ont.

1492 MACHINERY, Can Making.

See Machinery, Tinware, etc.

1493 MACHINERY, Canning.

*Letson & Burpee, Limited, Vancouver, B.C.
*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863)
*Schaake Machine Works, Limited, New Westminster, B.C.
*Wilson, J. C., & Co., Glenora, Ont.

1494 MACHINERY, Cement Making.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*Owen Sound Iron Works Co., Limited, The, Owen Sound, Ont.
*Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861).

1495 MACHINERY, Centrifugal.

*De Laval Mfg. Co., The, Montreal, Que.

1496 MACHINERY, Cloth Cutting.

Eastman Machine Co., Limited, The, Toronto, Ont.

1497 MACHINERY, Coal Handling.

Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864).
*Brown Machine Co., The, New Glasgow, N.S.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862).

1498 MACHINERY, Conveyor.

*Brown Machine Co., The, New Glasgow, N.S.
*Dodge Mfg. Co. of Toronto, Limited, Toronto, Ont. (Adv. page 831).
Jeffrey Mfg. Co., Montreal, Que. (Adv. page 1027).
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)

Miller Bros. & Toms, Montreal, Que. (Adv. page 1041).
*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863).
Robertson Machinery Co., Limited, The, Welland, Ont.

1499 MACHINERY, Dredging.

Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864).
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv page 827).

1500 MACHINERY, Electrical.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
Canadian General Electric Co., Limited, Toronto, Ont.
Consolidated Electric Co., Limited, Toronto, Ont.
Electrical Construction Co., Limited, The, London, Ont.
*Forman, John, Montreal, Que.
Hinton Electric Co., Limited, The, Vancouver, B.C.
Stuart Machinery Co., Limited, The, Winnipeg, Man.

1501 MACHINERY, Emery Wheel.

*Canadian Hart Wheels, Limited, Hamilton, Ont. (Adv. page 1019).
*Prescott Emery Wheel Co., Limited, Prescott, Ont.

1502 MACHINERY, Felt.

*Shantz, I. E., & Co., Berlin, Ont.

1503 MACHINERY, Flax Mill.

Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.

1504 MACHINERY, Flour and Oatmeal Mill.

*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833).
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*Stratford Mill Building Co., Limited, The, Stratford, Ont.
Stuart Machinery Co., Limited, The, Winnipeg, Man.

1505 MACHINERY, Furniture Factory.

See Machinery, Woodworking.

1506 MACHINERY AND APPARATUS, Gas Plant.

*Economical Gas Apparatus Construction Co., Limited, The, Toronto, Ont.

1507 MACHINERY, Grain Elevator.

*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833).
Manitoba Iron Works, Limited, The, Winnipeg, Man.
*Stratford Mill Building Co., Limited, The, Stratford, Ont.
Vulcan Iron Works, Limited, The, Winnipeg, Man.

1508 MACHINERY, Grain Handling.

*Dodge Mfg. Co. of Toronto, Limited, Toronto, Ont. (Adv. page 831).

1509 MACHINERY, Grinding and Polishing.

*Canadian Hart Wheels, Limited, Hamilton, Ont. (Adv. page 1019).
Cowan & Co., of Galt, Limited, Galt, Ont.
*Prescott Emery Wheel Co., Limited, Prescott, Ont.
*Stevens Co. of Galt, Limited, The, Galt, Ont. (Adv. page 1003).
Williams, The A. R., Co., Limited, Toronto, Ont.

1510 MACHINERY, Hoisting.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864).
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Mount Royal Foundry Co., Limited, The, Montreal, Que.
*Polson Iron Works, Limited, Toronto, Ont. (Adv. page 1033).
Robertson Machinery Co., Limited, Welland, Ont.
*Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861).

1511 MACHINERY, Hoop, Stave and Heading.

Park Bros., Chatham, Ont.

1512 Machinery, Hydraulic.

McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*Wilson, J. C., & Co., Glenora, Ont.

1513 MACHINERY, Ice Cream.

Fletcher Mfg. Co., Limited, Toronto, Ont.
*McLaughlin, J. J., Limited, Toronto, Ont.

1514 MACHINERY, Ice Making.

Linde British Refrigeration Co., Limited, The, Montreal, Que. (Adv. page 867).

1515 MACHINERY, Iron Working.

*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828).
Gardner, Robt., & Son, Montreal, Que. (Adv. page 1043.)
Hamilton Tool Co., Limited, Hamilton, Ont.
*London Machine Tool Co., Limited, The, Hamilton, Ont. (Adv. page 1016).
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019).
*MacGregor, Gourlay Co., Limited, The, Galt, Ont.
*Stevens Co. of Galt, Limited, The, Galt, Ont. (Adv. page 1003).
Stuart Machinery Co., Limited, The, Winnipeg, Man.

1516 MACHINERY, Knitting.

*Creelman Bros., Georgetown, Ont.

1517 MACHINERY, Lath Mill.

Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Oxford Foundry & Machine Co., Oxford, N.S.
Petrie, H. W., Toronto, Ont.
Plessisville, La Fonderie de, Plessisville, Que.
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858)
*St. John Iron Works, Limited, St. John, N.B.
*Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861).
Williams, The A. R., Machinery Co., Limited, Toronto, Ont.
Williams, The Madison, Mfg. Co., Limited, Lindsay, Ont.

1518 MACHINERY, Laundry.

*Constantin & O'Brien, Montreal, Que.
Stuart Machinery Co., Limited, The, Winnipeg, Man.

1519 MACHINERY, Leather.

*Drolet, F. X., Quebec, Que.

1520 MACHINERY, Mining.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
*Brown Machine Co., The, New Glasgow, N.S.
*Canadian Rand Co., Limited, Montreal, Que.
*Cumming, J. W., New Glasgow, N.S.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862).
Moir, W. & A., Halifax, N.S.
*Mussens, Limited, Montreal, Que.
Oxford Foundry & Machine Co., Oxford, N.S.
*Vancouver Engineering Works, Limited, Vancouver, B.C.
Windsor Foundry & Machine Co., Limited, Windsor, N.S.

1521 MACHINERY, Nail Making.

Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Maritime Nail Co., Limited, St. John, N.B.

1522 MACHINERY, Packing House.

See Machinery, Abattoir.

1523 MACHINERY, Paper Mill.

*Jenckes Machine Co., Limited, Sherbrooke, Que.
*Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861).

1524 MACHINERY, Pipe Threading.

See Machinery, Bolt and Nut, etc.

1525 MACHINERY, Power Transmission.

*Dodge Mfg. Co. of Toronto, Limited, Toronto, Ont. (Adv. page 831).
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833).
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044).
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Robertson Machinery Co., Limited, The, Welland, Ont.
*Wilson, J. C., & Co., Glenora, Ont.

1526 MACHINERY, Pulpwood and Pulp.

Fleming, James, St. John, N.B.
*Jenckes Machine Co., Limited, Sherbrooke, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*Robb Engineering Co., Limited, The, Amherst, N.S. (Adv. page 858).
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861).

1527 MACHINERY, Pumping.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993).
Canadian Buffalo Forge Co., Limited, Montreal, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019).
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

1528 MACHINERY, Refrigerating.

Linde British Refrigeration Co., Limited, The, Montreal, Que. (Adv. page 867).

1529 MACHINERY, Roadmaking

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
*Bell, B., & Son Co., Limited, St. George, Ont.
Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.
Sawyer & Massey Co., Limited, Hamilton, Ont.

1530 MACHINERY, Rock Drilling (Sub-marine).

Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864).

1531 MACHINERY, Saw, Shingle and Planing Mill.

Alexander Fleck, Limited, Ottawa, Ont.
Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
*Amherst Foundry Co., Limited, Amherst, N.S. (Adv. page 849).
*Ballantine, John, & Co., Preston, Ont.
Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.
*Berlin Machine Works, Limited, Hamilton, Ont.
*Chalifoux, O., & Fils, St. Hyacinthe, Que.
Cowan & Co. of Galt, Limited, Galt, Ont.
*Drolet, F. X., Quebec, Que.
Fleming, James, St. John, N.B.
Gardner, Robt., & Son, Montreal, Que. (Adv. page 1043.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833).
*Jackson, Cochrane & Co., Berlin, Ont.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Letson & Burpee, Vancouver, B.C.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Oxford Foundry & Machine Co., Oxford, N.S.
Park Bros., Chatham, Ont.
Plessisville, La Fonderie de, Plessisville, Que.
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858).
*Owen Sound Iron Works Co., Limited, The, Owen Sound, Ont.
Petrie, H. W., Toronto, Ont.
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
Sawyer & Massey Co., Limited, Hamilton, Ont.
*Schaake Machine Works, Limited, The, New Westminster, B.C.
*Stewart, Bruce, & Co., Charlottetown, P.E.I.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861).
*White, The George, & Sons Co., Limited, London, Ont.
Williams, The A. R., Machinery Co., Limited, Toronto, Ont.
Williams, The Madison, Mfg. Co., Limited, Lindsay, Ont.
Windsor Foundry & Machine Co., Limited, Windsor, N.S.

1532 MACHINERY, Sheet Metal Working.

*London Machine Tool Co., Limited, The, Hamilton, Ont. (Adv. page 1016).

1533 MACHINERY, Shoe.

*Constantin & O'Brien, Montreal, Que.
*United Shoe Machinery Co. of Canada, Montreal, Que.

1534 MACHINERY, Smelting.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)

1535 MACHINERY, Soda and Aerated Water.

Fletcher Mfg. Co., Limited, Toronto, Ont.
*Wilson & Cousins, Toronto, Ont.

1536 MACHINERY, Special.

Armstrong, Mervin, Toronto, Ont.
Augustin & Daudelin, St. Hyacinthe, Que.
*Ballantine, John, & Co., Limited, Preston, Ont.
*Bawden Machine & Tool Co., Toronto, Ont.
*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828).
*Bredannaz, Louis, & Sons, Toronto, Ont.
*Canadian Bearings, Limited, Hamilton, Ont.

*Canadian Hart Wheels, Limited, Hamilton, Ont. (Adv. page 1019).
Canadian Rand Co., Limited, Montreal, Que.
Cowan & Co. of Galt, Limited, Galt, Ont.
Gardner, Robert, & Son, Montreal, Que. (Adv. page 1043.)
*Gies, Philip, Berlin, Ont.
Hamilton Tool Co., Limited, Hamilton, Ont.
*Higel, The Otto, Co., Limited, Toronto, Ont.
*London Machine Tool Co., Limited, The, Hamilton, Ont. (Adv. page 1016).
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019).
*Maritime Nail Co., Limited, St. John, N.B.
Norsworthy, C., & Co., St. Thomas, Ont.
*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863)
Plessisville, La Fonderie de, Plessisville, Que.
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858).
Schofield-Holden Machine Co., Limited, Toronto, Ont.
*Shantz, I. E., & Co., Berlin, Ont.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
*Standard Contracting Co., Limited, Toronto, Ont.
*Sutherland Rifle Sight Co., Limited, The, New Glasgow, N.S.
*Thompson, J., & Son, Toronto, Ont.
*Whitfield, The John, Co., Toronto, Ont.

1537 MACHINERY, Stamp Mill.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

1538 MACHINERY, Tannery.
*Shantz, I. E., & Co., Berlin, Ont.

1539 MACHINERY, Textile.
*Berlin Machine Works, Limited, Hamilton, Ont.
*Bredannaz, Louis, & Sons, Toronto, Ont.
*Karch, H. W., Hespeler, Ont.

1540 MACHINERY, Tinware, Tinsmiths' and Can Making.
*Acme Can Works, Montreal, Que.
*Brown-Boggs Co., Limited, The, Hamilton. Ont.
*Letson & Burpee, Limited, Vancouver, B.C.
*London Machine Tool Co., Limited, The, Hamilton, Ont. (Adv. page 1016).
*Schaake Machine Works, Limited, The, New Westminster, B.C.

1541 MACHINERY, Water-Wheel.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Plessisville, La Fonderie de, Plessisville, Que.
*Wilson, J. C., & Co., Glenora, Ont.

1542 MACHINERY, Weighing.
See Scales.

1543 MACHINERY, Well Drilling.
Brandon Machine Works Co., Limited, Brandon, Man.
Kerr, J. & J., Co., Limited, The, Petrolia, Ont.
Norsworthy, C., & Co., St. Thomas, Ont.
*Oil Well Supply Co., Limited, Petrolia, Ont.

1544 MACHINERY, Woodworking.
*Ballantine, John, & Co., Limited, Preston, Ont.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Berlin Machine Works, Limited, Hamilton, Ont.
*Clark-Demill Co., Limited, Hespeler, Ont. (Adv. page 838).
Cowan & Co. of Galt, Limited, Galt, Ont.
Gardner, Robt., & Son, Montreal, Que. (Adv. page 1043.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833).
*Jackson, Cochrane & Co., Berlin, Ont.
*MacGregor, Gourlay Co., Limited, The, Galt, Ont.
Park Bros., Chatham, Ont.
Petrie, H. W., Toronto, Ont.
Plessisville, La Fonderie de, Plessisville, Que.
*Shantz, I. E., & Co., Berlin, Ont.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
Sussex Mfg. Co., Limited, The, Sussex, N.S.
Williams, The A. R., Machinery Co., Limited, Toronto, Ont.

1545 MACHINERY, Woollen.
See Machinery, Textile.

1546 MACHINES, Acetylene Gas
See Generators, Acetylene Gas.

1547 MACHINES, Boring.
*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828).
*Clark-Demill Co., Limited, Hespeler, Ont. (Adv. page 838).
*Cumming, J. W., New Glasgow, N.S.
Norsworthy, C., & Co., St. Thomas, Ont.
*Oil Well Supply Co., Limited, Petrolia, Ont.

1548 MACHINES, Bottling.
See Machinery, Bottling.

1549 MACHINES, Cheese Box, Automatic.
*Clark-Demill Co., Limited, The, Hespeler, Ont. (Adv. page 838).

1550 MACHINES, Composing.
*Mergenthaler Co., Limited, The, Montreal, Que.
*Toronto Type Foundry Co., Limited, Winnipeg, Man.

1551 MACHINES, Concrete Block.
*Mussens, Limited, Montreal, Que.
Woodstock Wind-Motor Co., Limited, Woodstock, Ont.

1552 MACHINES, Copying.
*Library Bureau of Canada, Limited, Ottawa, Ont. (Adv. page 848).
Office Specialty Mfg. Co., Limited, The, Toronto, Ont.

1553 MACHINES, Disinfecting.
*Zenner Disinfectant Co., Windsor, Ont.

1554 MACHINES, Ditching.
Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864).
Harris, J. W., Mfg. Co., Limited, Montreal, Que.
Norsworthy, C., & Co., St. Thomas, Ont.

1555 MACHINES, Door Clamp.
*Clark-Demill Co., Limited, Hespeler, Ont. (Adv. page 838).

1556 MACHINES, Drilling.
*Bawden Machine & Tool Co., Toronto, Ont.
*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828).
Gardner, Robt., & Son, Montreal, Que. (Adv. page 1043.)
Jardine, A. B., & Co., Hespeler, Ont.
London Foundry Co., Limited, The, London, Ont.
*London Machine Tool Co., Limited, The, Hamilton, Ont. (Adv. page 1016).
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019).
*Oil Well Supply Co., Limited, Petrolia, Ont.

1557 MACHINES, Dyeing.
*Bredannaz, Louis, & Sons, Toronto, Ont.
*Karch, H. W., Hespeler, Ont.

1558 MACHINES, Flange and Riveting.
*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828).

1559 MACHINES, Foundrymen's Testing.
*Gurney Scale Co., The, Hamilton, Ont.
Hamilton Facing Mill Co., Limited, Hamilton, Ont.

1560 MACHINES, Knitting.
*Creelman Bros., Georgetown, Ont.

1561 MACHINES, Letter Duplicating.
*United Typewriter Co., Limited, Toronto, Ont. (Adv. page 1032)

1562 MACHINES, Linotype.
See Machines, Composing.

1563 MACHINES, Lumber Measuring.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).

1564 MACHINES, Milling.
*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828).
*London Machine Tool Co., Limited, The, Hamilton, Ont. (Adv. page 1016).
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019).
*MacGregor, Gourlay Co., Limited, The, Galt, Ont.
Moir, W. & A., Halifax, N.S.

1565 MACHINES, Moulding.
*Ballantine, John, & Co., Limited, Preston, Ont.
*Berlin Machine Works, Limited, Hamilton, Ont.
*Clark-Demill Co., Limited, Hespeler, Ont. (Adv. page 838).
Cowan & Co. of Galt, Limited, Galt, Ont.
Hamilton Facing Mill Co., Limited, Hamilton, Ont.

1566 MACHINES, Numbering.
Walker & Campbell, Montreal, Que.

1567 MACHINES, Planing.
See Planers.

1568 MACHINES, Plating.
Jones & Moore Electric Co., Limited, Toronto, Ont.

1569 MACHINES, Rubber Cutting.
Augustin & Daudelin, St. Hyacinthe, Que.

1570 MACHINES, Sawing.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Berlin Machine Works, Limited, Hamilton, Ont.
Brandon Machine Works Co., Limited, Brandon, Man.
*Chalifoux, O., & Fils, St. Hyacinthe, Que.
Cowan & Co., of Galt, Limited, Galt, Ont.
Williams, The A. R., Machinery Co., Limited, Toronto, Ont.

1571 MACHINES, Sewing.
*Raymond Mfg. Co., of Guelph, Limited, The, Guelph, Ont.
*Singer Mfg. Co., The, St. Johns, Que.
*Williams Mfg. Co., Limited, The, Montreal, Que. (Adv. page 1037).

1572 MACHINES, Sewing (Woodwork Only).
*Hay & Co., Woodstock, Ont.

1573 MACHINES, Shearing.
*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828).
*London Machine Tool Co., Limited, The, Hamilton, Ont. (Adv. page 1016).

1574 MACHINES, Soldering.
*Letson & Burpee, Limited, Vancouver, B.C.

1575 MACHINES, Spooling and Doubling.
*Karch, H. W., Hespeler, Ont.

1576 MACHINES, Spraying and Painting.
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019).
*Spramotor Co., The, London, Ont.

1577 MACHINES, Threshing.
American-Abell Engine & Thresher Co., Limited, Toronto, Ont.
*Belanger, A., Montmagny, Que.
Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.
*Bessette, La Cie J. & S., Ltee, Iberville, Que.
*Chalifoux, O., & Fils, St. Hyacinthe, Que.
*Faucher & Fils, Montreal, Que.
*Goodison, The John, Thresher Co., Limited, Sarnia, Ont.
Macdonald Mfg. Co., Stratford, Ont.
New Hamburg Mfg. Co., Limited, The, New Hamburg, Ont.
Sawyer & Massey Co., Limited, Hamilton, Ont.
Waterloo Mfg. Co., Limited, Waterloo, Ont.
*White, The George, & Sons Co., Limited, London, Ont.
Woon, R., & Co., Oshawa, Ont.

1578 MACHINES, Trimming, for Boxes.
*Ontario Box Co., Limited, The, Hamilton, Ont.

1579 MACHINES, Typesetting.
See Machines, Composing.

1580 MACHINES, Valve Re-Seating.
Darling Bros., Limited, Montreal, Que.

1581 MACHINES, Warping.
Karch, H. W., Hespeler, Ont.

1582 MACHINES, Washing.
Connor, J. H., & Son, Limited, Ottawa, Ont.
Dowswell Mfg. Co., Limited, The, Hamilton, Ont.
London Foundry Co., Limited, The, London, Ont.
*Maxwell, David, & Sons, St. Mary's, Ont.
*Schultz Bros. Co., Limited, The, Brantford, Ont.
Taylor-Forbes Co., Limited, Guelph, Ont.
*Thomas Bros., Limited, St. Thomas Ont.
*Wortman & Ward Co., Limited, The, London, Ont.

1583 MACHINES, Well Boring.
See Machinery, Well Drilling.

1584 MACHINES, Woodboring, Carpenters' Boring, Hub Boring, Mortising, Etc.
*Ballantine, John, & Co., Limited, Preston, Ont.
*Clark-Demill Co., Limited, Hespeler, Ont. (Adv. page 838).
Cowan & Co. of Galt, Limited, Galt, Ont.
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Jardine, A. B., & Co., Hespeler, Ont.
*MacGregor, Gourlay Co., Limited, The, Galt, Ont.

1585 MACHINISTS.
*Acme Can Works, Montreal, Que.
Armstrong, Mervin, Toronto, Ont.
Augustin & Daudelin, St. Hyacinthe, Que.
Bailey, Geo., Ottawa, Ont.
*Bessette, La Cie J. & S., Ltee, Iberville, Que.
*Bredannaz, Louis, & Sons, Toronto, Ont.
*Canada Cycle & Motor Co., Limited, West Toronto, Ont. (Adv. opp. Inside Back Cover.)
*Constantin & O'Brien, Montreal, Que.
Dickson Bros. Co., Limited, Campbellford, Ont.
Fee, John, Montreal, Que.
*Garth Co., The, Montreal, Que.
Hall Engineering Works, Montreal, Que.
Macdonald & Co., Limited, Halifax, N.S.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041).
*New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
Northern Iron Works, Limited, Winnipeg, Man.

Ottawa Steel Casting Co., Limited, Ottawa, Ont.
*Owen Sound Iron Works Co., Limited, The, Owen Sound, Ont.
*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863).
*Pink, Thomas, Pembroke, Ont.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
Sydney Foundry & Machine Works, Limited, The, Sydney, N.S.
*Thompson, J., & Son, Toronto, Ont.
Weir, J. & R., Montreal, Que.
White, R. C., Montreal, Que.
*Whitfield, The John, Co., Toronto, Ont.
*Wilson & Cousins, Toronto, Ont.
Windsor Foundry & Machine Co., Limited, Windsor, N.S.

1586 MAGNESITE, Calcined.

Canadian Carbonate Co., Cote St. Paul, Montreal, Que.

1587 MAGNETS.

Dominion Electrical Works, Limited, Halifax, N.S.
*St. Lawrence Steel & Wire Co., Limited, Gananoque, Ont.

1588 MALLETS, Raw Hide.

*Constantin & O'Brien, Montreal, Que.
Hamilton Facing Mill Co., Limited, Hamilton, Ont.

1589 MALLETS, Tinners' and Carpenters'.

*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852).

1590 MALT.

Calgary Brewing & Malting Co., Limited, Calgary, Alta.
*Canada Malting Co., Limited, The, Toronto, Ont.
Cosgrave Brewery Co. of Toronto, Limited, The, Toronto, Ont.
Dawes & Co., Montreal, Que.
Dominion Brewery Co., Limited, The, Toronto, Ont.
*Dow, Wm., & Co., Montreal, Que.
*Eaton Bros. Brewing Co. of Owen Sound, Limited, The, Owen Sound, Ont.
Drewry, Edward L., Winnipeg, Man.
Holliday Bros., Guelph, Ont.
*Labatt, John, London, Ont.
McDonagh & Shea, Winnipeg, Man.
*O'Keefe Brewery Co. of Toronto, Limited, The, Toronto, Ont.
Toronto Brewing & Malting Co., Limited, Toronto, Ont.
Walkerville Brewing Co., Limited, The, Walkerville, Ont.

1591 MANDRELS, Taper.

Jardine, A. B., & Co., Hespeler, Ont.
*Pratt & Whitney Co. of Canada, Limited, Dundas, Ont. (Adv. page 828).

1592 MANGLES.

Dowswell Mfg. Co., Limited, The, Hamilton, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020).
Taylor-Forbes Co., Limited, Guelph, Ont.

1593 MANHOLES.

See Castings, Manhole.

1594 Manifolds, Dry Kiln.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).

1595 MANTELS, Brick.

Milton Pressed Brick Co., Limited, Milton, Ont.

1596 MANTELS, Wood.

*Berlin Interior Hardwood Co., Limited, The, Berlin, Ont.
Burton & Baldwin Mfg. Co., Limited, The, Hamilton, Ont.
Christie Woodworking Co., Limited, The, St. John, N.B.
Cushing Bros. Co., Limited, Calgary, Alta.
*Fox Bros. & Co., Limited, Windsor, Ont.
Lemon, Gonnason & Co., Victoria, B.C.
*Malcolm & Souter Furniture Co., Limited, Hamilton, Ont.
Murray, G. W., Co., Limited, Winnipeg, Man.
*Phillips Mfg. Co., Limited, Toronto, Ont. (Adv. page 1000).
Rathbun Co., The, Deseronto, Ont.
*Reid, Robert, Montreal, Que.
Rhodes, Curry & Co., Limited, Amherst, N.S.
*Robertson & Hackett, Vancouver, B.C.
Rogers, The Chas., & Sons Co., Limited, Toronto, Ont.
*Schultz Bros. Co., Limited, The, Brantford, Ont.
Wilson Bros., Limited, Collingwood, Ont.
Winnipeg Paint & Glass Co., Limited, The, Winnipeg, Man.

1597 MANTLES, Incandescent Gas.

*Auer Incandescent Light Mfg. Co., Limited, Montreal, Que.

1598 MAPS.

*Benallack Lithographing & Printing Co., The, Montreal, Que.
Bulman Bros., Limited, Winnipeg, Man.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
*Copeland-Chatterson-Crain, Limited, Toronto, Ont.
Copp, Clark Co., Limited, The, Toronto, Ont.
*Gage, W. J., & Co., Limited, Toronto, Ont.
Hendry, The Geo. M., Co., Limited, Toronto, Ont.
*Howell Lithographing Co., Hamilton, Ont.
*McAlpine Publishing Co., Limited, Halifax, N.S.
*Rolph & Clark, Limited, Toronto, Ont. (Adv. page 998).
Stovel Co., The, Winnipeg, Man.
*Toronto Lithographing Co., Limited, The, Toronto, Ont.

1599 MARBLE AND GRANITE BUILDING MATERIAL.

Brodie, James, & Son, Graniteville, Que.
Hooper's Marble & Granite Co., Limited, Winnipeg, Man.
McIntosh-Gullett Co., Limited, Toronto, Ont.
*Milne, Coutts & Co., Limited, St. George, N.B.
Mineral Range Iron Mining Co., Limited, The, Bessemer, Ont.
*Missisquoi Marble Co., Limited, The, Montreal, Que.
*Norton, S. B., Stanstead Junction, Que.
*Reid, Robert, Montreal, Que.
*Tayte, Meating & Co., St. George, N.B.

1600 MARKERS, Pavement.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029).

1601 MARMALADE.

*Davies, The Wm., Co., Limited, Toronto, Ont.
Imperial Extract Co., Toronto, Ont.
Lytle, The T. A., Co., Limited, Toronto, Ont.
Ozo Co., Limited, The, Montreal, Que.
Quebec Preserving Co., Quebec, Que. (Adv. page 1032).
Upton, The T., Co., Limited, Hamilton, Ont.

1602 MATCH SPLINTS.

See Splints, Match.

1603 MATCHERS.

See Machinery, Woodworking.

1604 MATCHES.

Eddy, The, E. B., Co., Limited, Hull, Que.
Improved Match Co., Limited, The, Drummondville, Que.
Rousseau, J. A., Ste. Anne de la Perade, Que.

1605 MATS, Bath, Carriage and Door.

Toronto Carpet Mfg. Co., Limited, Toronto, Ont.

1606 MATS, Brussels, Smyrna, Wilton.

Canadian Axminster Co., Limited, Hamilton, Ont.
Guelph Carpet Mills Co., Limited, The, Guelph, Ont.
Toronto Carpet Mfg. Co., Limited, Toronto, Ont.

1607 MATS, Door (Wire).

Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043).
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044).
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009).

1608 MATS, Rubber.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018).
Durham Rubber Co., Limited, The, Bowmanville, Ont. (Adv. page 844).
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

1609 MATTING, Rubber, Plain, Corrugated, Pebbled.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)

1610 MATTOCKS.

*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
*Welland Vale Mfg. Co., Limited, The, St. Catharines, Ont. (Adv. page 1040).

1611 MATTRESSES.

Alaska Feather & Down Co., Limited, Montreal, Que. (Adv. page 860).
B. C. Bedding & Upholstering Co., Limited, Vancouver, B.C.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
*Canadian Feather & Mattress Co., Limited, The, Toronto, Ont.
Dymond, The W. P., Co., Limited, Strathroy, Ont.
Edmonton Tent & Mattress Co., Limited, Edmonton, Alta.
Ellis Furniture Co., The, Ingersoll, Ont.
*Gale, Geo., & Sons, Waterville, Que.
Gold Medal Furniture Mfg. Co., Limited, Toronto, Ont.
Ives, The H. R., Co., Limited, Montreal, Que.
Leslie, John, Winnipeg, Man.
*Morlock Bros., Guelph, Ont.
*Munro Wire Works, Limited, New Glasgow, N.S.
Ross, The C., Co., Limited, Ottawa, Ont.
*St. Lawrence Furniture Co., The, Fraserville, Que.
*Toronto Bedding Co., Limited, The, Toronto, Ont.
Whitworth & Restall, Toronto, Ont.
Wilder, H. A., & Co., Montreal, Que.

1612 Mattresses, Gymnasium.

Leckie, John, Limited, Toronto, Ont.

1613 MAULS.

*Cumming, J. W., New Glasgow, N.S.
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041).
*Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020).
Warnock, The James, Co., Limited, Galt, Ont.
*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

1614 MEAL, Bone.

*Canada Glue Co., Limited, Brantford, Ont.
Freeman, The W. A., Co., Limited, Hamilton, Ont.
*Nova Scotia Fertilizer Co., The, Halifax, N.S.

1615 MEAL, Corn and Wheat.

Canada Flour Mills Co., Limited, Chatham, Ont.
*Flavelle Milling Co., Limited, The, Lindsay, Ont.
*Georgian Bay Milling & Power Co., Limited, Meaford, Ont.
*Goldie, The James, Co., Limited, Guelph, Ont.
Hart, Levi, & Son, Limited, Halifax, N.S.
Johnson & McDonald, New Glasgow, N.S.
*McCann, Knox Milling Co., Limited, Toronto, Ont.
*McIntosh, P., & Son, Toronto, Ont.
*Ogilvie Flour Mills Co., Limited, The, Montreal, Que.
Oliver, R. W., Milling Co., Limited, Montreal, Que.
*Quaker Oats Co., The, Peterboro, Ont.
*St. John Milling Co., Limited, West St. John, N.B.
*Western Canada Flour Mills Co., Limited, Toronto, Ont.

1616 MEAL, Gluten.

*Canada Starch Co., Limited, Brantford, Ont.
*Edwardsburg Starch Co., Limited, Montreal, Que.

1617 MEAL, Linseed and Oil Cake.

*Canada Linseed Oil Mills, Limited, Montreal, Que.
Dominion Linseed Oil Co., Limited, Baden, Ont.
Nicholson & Brock, Toronto, Ont.

1618 MEAL, Sugar Beet.

Wallaceburg Sugar Co., Limited, The, Wallaceburg, Ont.

1619 MEAL, Oat.

See Oatmeal.

1620 MEATS, Cooked and Canned.

*Canadian Canners, Limited, Hamilton, Ont.
*Canadian Packing Co., Limited, London, Ont.
Clark, William, Montreal, Que.
*Collingwood Packing Co., Limited, Collingwood, Ont.
*Davies, The Wm., Co., Limited, Toronto, Ont.
*Dominion Meat Co., Limited, The, Calgary, Ont.
*Ingersoll Packing Co., Limited, The, Ingersoll, Ont.
Laing Packing & Provision Co., Limited, The, Montreal, Que.
Manitoba Canning Co., Limited, Grande Point, Man.
Northland Mfg. Co., The, Toronto, Ont.
*Matthews, The Geo., Co., Limited, Peterboro, Ont.
*O'Mara, Joseph, Palmerston, Ont.
*Park, Blackwell Co., Limited, Toronto, Ont.
Van Bever Packing & Provision Co., Limited, The, West Toronto, Ont.

1621 MEATS, Dressed.

Burns, P., & Co., Calgary, Alta.
*Dominion Meat Co., Limited, The, Calgary, Alta.
*Gordon, Ironside & Fares Co., Limited, Winnipeg, Man.
*Harris Abattoir Co., Limited, The, Toronto, Ont.
*Martin, The D. B., Co., Limited, West Toronto, Ont.
*Park, Blackwell Co., Limited, Toronto, Ont.
Western Packing Co. of Canada, Limited, Winnipeg, Man.
Whyte Packing Co., Limited, The, Stratford, Ont.

1622 MEAT, Mince.

*Capstan Mfg. Co., Toronto, Ont.
*Davies, The Wm., & Co., Limited Toronto, Ont.
Imperial Extract Co., Toronto, Ont.
Nicholson & Brock, Toronto, Ont.
Northland Mfg. Co., The, Toronto, Ont.
*Wethey, J. H., Limited, St. Catharines, Ont.

1623 MEDALS AND BADGES.

Birks, Henry, & Sons, Limited, Montreal, Que.
Capp, The T. W., Co., Toronto, Ont.
*Caron Bros., Montreal, Que.
Ellis, Geo. E., & Co., Winnipeg, Man.
*Ellis, P. W., & Co., Limited, Toronto, Ont. (Adv. page 855).

Hamilton Stamp & Stencil Works, Limited, Hamilton, Ont.
*Hemming Mfg. Co., Limited, Montreal, Que. (Adv. page 1013).
*Hemsley Mfg. Co., The, Montreal, Que.
*Lees, Geo. H., & Co., Limited, Hamilton, Ont.
*Roden Bros., Toronto, Ont. (Adv. page 1048.)
Wanless, John, & Co., Toronto, Ont.
*Zock, J. J., & Co., Limited, Toronto, Ont.

1624 MEDICINES, Proprietary.

Briggs, G. C., & Sons, Hamilton, Ont.
*Hanford, G. C., Mfg. Co., Montreal, Que.
*K. D. C. Co., Limited, New Glasgow, N.S.
Lyman Bros. & Co., Limited, The, Toronto, Ont. (Adv. page 1047.)
Mathieu, The J. L., Cie, Sherbrooke, Que.
*Morin, Dr. Ed., & Co., Quebec, Que.
*Northrop & Lyman Co., Limited, Toronto, Ont.
*Parke, Davis & Co., Walkerville, Ont.
Stearns, Frederick, & Co., Windsor, Ont.
Toronto Pharmacal Co., Limited, The, Toronto, Ont.

1625 MEDICINES, Veterinary.

*Greig, The Robert, Co., Limited, Toronto, Ont.
*Heney, E. N., Co., Limited, Montreal, Que.
*International Stock Food Co., Toronto, Ont.
Pratt Food Co. of Canada, Limited, Toronto, Ont.

1626 MELTONS.

See Cloth, Melton.

1627 METAL, Architectural Sheet.

Galt Art Metal Co., Limited, The, Galt, Ont. (Adv. page 1034).
Matthews, A., Toronto, Ont.
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999).
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995).
*Pedlar Metal Roofing Co., The, Oshawa, Ont.

1628 METAL, Babbitt.

Canada Metal Co., Limited, The, Toronto, Ont. (Adv. page 869).
*Cuthbert, W. R., & Co., Montreal, Que.
Fleming, James, St. John, N.B.
*Frankel Bros., Toronto, Ont.
Lumen Bearing Co., West Toronto, Ont. (Adv. page 1031).
*McAvity, T., & Sons, St. John, N.B.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041).
Robertson, The James, Co., Limited, The, Montreal, Que.
Robertson, Thomas, & Co., Limited, Montreal, Que.
Shaw & Mason, Limited, Sydney, N.S.
*Spooner, Alonzo W., Port Hope, Ont.
Syracuse Smelting Works, Montreal, Que.
*Tallman, J. N., & Sons, Hamilton, Ont.
Wing, J. T., & Co., Windsor, Ont.

1629 METAL, Electrotype, Stereotype and Linotype.

Canada Metal Co., Limited, Toronto, Ont. (Adv. page 869.)
*Cuthbert, W. R., & Co., Montreal, Que.
Shaw & Mason, Limited, Sydney, N.S.
Syracuse Smelting Works, Montreal, Que.
*Tallman, J. N., & Sons, Hamilton, Ont.

1630 METAL, Expanded.

*Expanded Metal & Fireproofing Co., Limited, Toronto, Ont. (Adv. page 1056.)
Galt Art Metal Co., Limited, The, Galt, Ont. (Adv. page 1034.)

1631 METAL, Perforated Sheet.

Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)

1632 METAL STAMPING.

*Banfield, W. H., & Sons, Toronto, Ont. (Adv. page 1048.)
*Chadwick Bros., Hamilton, Ont.
Kemp Mfg. Co., Toronto, Ont.
Morrow, The John, Screw, Limited, Ingersoll, Ont.
Ontario Lantern & Lamp Co., Limited, Hamilton, Ont. (Adv. page 830.)
*Patterson & Heward, Toronto, Ont.
*Standard Contracting Co., Limited, Toronto, Ont.
Stanyon Metallic Furniture Co., Limited, Toronto, Ont.
*Thompson, J., & Son, Toronto, Ont.

1633 METERS, Electrical.

Canadian General Electric Co., Limited, Toronto, Ont.
Canadian Westinghouse Co., Limited, Hamilton, Ont.
*Packard Electric Co., Limited, The, St. Catharines, Ont. (Adv. page 876.)

1634 METERS, Gas.

*Canadian Meter Co., Limited, Hamilton, Ont.
Mitchell, The Robert, Co., Limited, Montreal, Que.
*Standard Meter Co., Limited, The, Toronto, Ont.

1635 METERS, Water.

*Garth Co., The, Montreal, Que.

1636 MIDDLINGS.

See Feeds.

1637 MILK, Condensed.

*Aylmer Condensed Milk Co., Limited, Aylmer, Ont.
Canada Condensed Milk Co., Limited, Antigonish, N.S.
*Charlottetown Condensed Milk Co., Limited, Charlottetown, P.E.I.
*Dunn, William H., Montreal, Que.
Ewing, S. H., & Sons, Montreal, Que.
*St. Charles Condensing Co., Ingersoll, Ont.
*Truro Condensed Milk Co., Limited, Truro, N.S.

1638 MILK, Dried.

Canadian Milk Products, Toronto, Ont.

1639 MILK PRODUCTS.

Canadian Milk Products, Toronto, Ont.

1640 MILLINERY.

See Hats, felt; Hats, ready-to-wear; Hats, straw.

1641 MILLS, Fanning.

Brandon Machine Works Co., Limited, Brandon, Man.
*Campbell, The Manson, Co., Limited, Chatham, Ont.

1642 MILLS, Planing.

Acme Supply Co., Limited, The, Toronto, Ont.
Aitchison, D., & Co., Hamilton, Ont.
*Blonde Lumber & Mfg. Co., Limited, The, Chatham, Ont.
Boake Mfg. Co., Limited, The, Toronto, Ont.
*Brennen, The M., & Sons Mfg. Co., Hamilton, Ont.
*B. C. Mills, Timber & Trading Co., Vancouver, B.C.
*Brockville Lumber Co., Limited, Brockville, Ont.
*Brunette Saw Mill Co., Limited, New Westminster, B.C.
*Burrill Lumber Co., The, Shawinigan Falls, Que.
*Canadian Pacific Lumber Co., Limited, The, Port Moody, B.C.
*Carew, John, Lindsay, Ont.
Cargill, H., & Son, Cargill, Ont.
Chalifour, O., Quebec, Que.
Christie Woodworking Co., Limited, The, St. John, N.B.
Clark, W. H., & Co., Limited, Edmonton, Alta.
Columbia River Lumber Co., Limited, Golden, B.C.
*Consumers' Box & Lumber Co., Limited, Toronto, Ont.
Cushing Bros. Co., Limited, Calgary, Alta.
Dand, Raymond, New Glasgow, N.S.
*Davidson, Jas., Ottawa Ont.
Dempster, Jas., & Co., Halifax, N.S.
Dominion Office & Store Fitting Co., Limited, London, Ont.
Dyment-Baker Lumber Co., The, London, Ont.
Eaton, J. R., Orillia, Ont.
Elliott, James S., & Son, Prescott, Ont.
*Empire Lumber Co., Limited, Toronto, Ont.
Foster, Clement A., Haileybury, Ont.
*Fox Bros. & Co., Limited, Windsor, Ont.
Georgian Bay Shook Mills, Limited, Midland, Ont.
Gignac, Beland & Cie., Quebec, Que.
Gignac, J. H., Limited, Quebec, Que.
*Gilmour Door Co., Limited, The, Trenton, Ont.
Gold Medal Furniture Mfg. Co., Limited, Toronto, Ont.
Gosselin, Joseph, Levis, Que.
Grant, Donald, & Son, New Glasgow, N.S.
Grant, John J., New Glasgow, N.S.
*Gravel, The A., Lumber Co., Limited, Etchemin Bridge, Que.
Hanbury Mfg. Co., The, Brandon, Man.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
Hastings Shingle Mfg. Co., Limited, Vancouver, B.C.
*Heaps, E. H., & Co., Vancouver, B.C. (Adv. page 850.)
Itzweire & Sarrasin, Montreal, Que.
Kerr, J. & J. Co., Limited, Petrolia, Ont.
Knight Bros. Co., Limited, The, Burk's Falls, Ont.
Laidlaw, R., Lumber Co., Limited, Toronto, Ont.
Lawton Co., Limited, St. John, N.B.
*Leigh, James, & Sons, Victoria, B.C.
Lemon, Gonnason & Co., Victoria, B.C.
Long, The Geo. Co., Limited, Sherbrooke, Que.
Mineral Range Iron Mining Co., Limited, The, Bessemer, Ont.
Morency, Louis, Quebec, Que.
*Murray & Gregory, Limited, St. John, N.B.
Murray, G. W., Co., Limited, Winnipeg, Man.
Nesbitt, E. T., Quebec, Que.
*Parry Sound Lumber Co., Limited, The, Toronto, Ont. (Adv. page 1038.)
Patterson-Tilley Co., The, Hamilton, Ont.
Pauze, The U., & Fils Co., Montreal, Que.
Pearce Co., Limited, The, Marmora, Ont.
*Pigeon River Lumber Co., Port Arthur, Ont.
Porto Rico Lumber Co., Limited, Nelson, B.C.
Quance Bros., Delhi, Ont.
Rat Portage Lumber Co., Limited, The, Kenora, Ont.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
*Robertson & Hackett, Vancouver, B.C.
Rutherford, The Wm., & Sons Co., Montreal, Que.
*Savward, J. A., Victoria, B.C.
*Schultz Bros. Co., Limited. The, Brantford, Ont.
Scott, The J. C., Co., Limited, Toronto, Ont.
*Seaman, Kent Co., Limited, The, Meaford, Ont.
*Sexton & Co., Limited, Toronto, Ont.
Sharpe, Walter, Quebec, Que.
Sheppard, James & Sons, Sorel, Que.
*Smith, John B., & Sons, Limited, Toronto, Ont.
Spanner Novelty Wood-Turning Co., Toronto, Ont.
Spencer Bros. & Turner, Limited, Truro, N.S.
Sprague Lumber Co., Limited, Winnipeg, Man.
Stewart, Robert, Limited, Guelph, Ont.
Sussex Mfg. Co., Limited, The, Sussex, N.S.
Tait & Co., Toronto, Ont.
*Terminal Lumber & Shingle Co., Limited, The, Vancouver, B.C.
Traversy, V. E., Montreal, Que.
Tremblay, F., & Cie, Montreal, Que.
Wilson Bros., Limited, Collingwood, Ont.
Wilson, The Geo., Building & Contracting Co., Limited, St. Catharines, Ont.
Winnipeg Paint & Glass Co., Limited, The, Winnipeg, Man.
Woodstock Lumber & Mfg. Co., Limited, The, Woodstock, Ont.

1643 MILLS, Shingle.

See Machinery, Saw, Shingle, etc.

1644 MILL STONES, for Grain and Flour.

Chinic Hardware Co., The, Quebec, Que.

1645 MINERAL WOOL.

Eureka Mineral Wool & Asbestos Co., Toronto, Ont. (Adv. page 1012.)
Hamilton Engine Packing Co., Hamilton, Ont.

1646 MIRRORS.

Clatworthy & Son, Toronto, Ont.
Maritime Art Glass Works, Limited, St. John, N.B.
*Phillips Mfg. Co., Limited, Toronto, Ont. (Adv. page 1000.)
*Pilkington Bros., Limited, Montreal, Que.
Queen City Plate Glass & Mirror Co., Limited, Toronto, Ont.
Ramsay, A. Frank, & Co., Montreal, Que. (Adv. page 845.)
Reardon, Frank, Halifax, N.S.
Sharpe, C. A., Montreal, Que.
Toronto Plate Glass Importing Co., Limited, The, Toronto, Ont.

1647 MITTS, Canvas, Leather Faced.

Storey, W. H., & Son, Limited, Acton, Ont.

1648 MITTS, Leather.

*Clarke, A. R., & Co., Limited, Toronto, Ont.
*Holt, Renfrew & Co., Quebec, Que.
*Hudson Bay Knitting Co., The, Montreal, Que.
*Laliberte, J. B., Quebec, Que.
Paquet Co., Limited, The, Quebec, Que.
*Ross, Henry, Indian Lorette, Que.
Storey, W. H., & Son, Limited, Acton, Ont.

1649 MITTS, Rubber.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)

1650 MITTS, Silk.

*Corticelli Silk Co., Limited, Montreal, Que.

1651 MITTS, Wool.

Ballantyne, R. M., Limited, Stratford, Ont.
Beaumont, Joseph, Glen Williams, Ont.
Carss Mackinaw Clothing Co., Orillia, Ont.
*Eagle Knitting Co., Limited, The, Hamilton, Ont.
Forbes, R., Co., Limited, Hespeler, Ont.
Goderich Knitting Co., Limited, The, Goderich, Ont.
Hall, The James, Co., Brockville, Ont.
*Hudson Bay Knitting Co., The, Montreal, Que.
*Knittofit Mfg. Co., The, Montreal, Que.
*Woods, Limited, Ottawa, Ont.

1652 MIXERS, Cement or Concrete.

*Goold, Shapley & Muir Co., Limited, Brantford, Ont.

McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Marsh & Henthorn, Belleville, Ont.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Mussens, Limited, Montreal, Que.
Niagara Falls Machine & Foundry Co., Limited, Niagara Falls, Ont. (Adv. page 1028.)
*Toronto Pressed Steel Co., Limited, The, Toronto, Ont.
*Wilkinson Plow Co., Toronto, Ont.

1653 MOCCASINS, Leather.

*Beal Bros., Toronto, Ont. (Adv. page 868.)
*Clarke, A. R., & Co., Limited, Toronto, Ont.
Daoust, Lalonde & Co., Montreal, Que.
*Galibert, F., Montreal, Que.
*Holt, Renfrew & Co., Quebec, Que.
*Hudson Bay Knitting Co., The, Montreal, Que.
*Laliberte, J. B., Quebec, Que.
*Palmer, John, Co., Limited, Fredericton, N.B.
Paquet Co., Limited, The, Quebec, Que.
*Peters Sons, C. H., St. John, N.B.
*Ross, Henry, Indian Lorette, Que.
*Woods, Limited, Ottawa, Ont.

1654 MOLESKIN, Cloth.

*Dominion Textile Co., Limited, Montreal, Que.

1655 MONITORS.

*Vancouver Engineering Works, Limited, Vancouver, B.C.

1656 MONUMENTS.

Brodie, James, & Son, Graniteville, Que.
Epps, Dodds & Co., St. George, N.B.
Hooper's Marble & Granite Co., Limited, Winnipeg, Man.
McIntosh-Gullett Co., Limited, Toronto, Ont.
*Milne, Coutts & Co., Limited, St. George, N.B.
*Missisquoi Marble Co., Limited, The, Montreal, Que.
*Norton, S. B., Stanstead Junction, Que.
*Reid, Robert, Montreal, Que.
*Stanstead Granite Quarries Co., Limited, Beebe Plain, Que.
*Tayte, Meating & Co., St. George, N.B.

1657 MOPS.

*Cumming Mfg. Co., Limited, The, Renfrew, Ont.
United Factories, Limited, Toronto, Ont.

1658 MORTARS.

*Jenckes Machine Co., Limited, The, Sherbrooke, Que.

1659 MOTORS, Air.

*Canadian Rand Co., Limited, Montreal, Que.

1660 MOTORS. Electric.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
Breckels & Matthews, Toronto, Ont.
Canadian General Electric Co., Limited, Toronto, Ont.
Canadian Westinghouse Co., Limited, Hamilton, Ont.
Consolidated Electric Co., Limited, Toronto, Ont.
Eastman Machine Co., Limited, The, Toronto, Ont.
Electrical Construction Co., Limited, The, London, Ont.
*Forman, John, Montreal, Que.
Hinton Electric Co., Limited, The, Vancouver, B.C.
Jones & Moore Electric Co., Limited. Toronto, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*Munderloh & Co., Montreal, Que.
*Packard Electric Co., Limited, The, St. Catharines, Ont. (Adv. page 876.)
*Parkin Elevator Co., Limited, The, Hespeler, Ont.
*Pringle, The R. E. T., Co., Limited, Montreal, Que.
Turnbull Elevator Mfg. Co., The, Toronto, Ont.

1661 MOTORS, Hydraulic.

*Breckels & Matthews, Toronto, Ont.

1662 MOULDERS.

See Machinery, Woodworking.

1663 MOULDERS' SUPPLIES.

Hamilton Facing Mill Co., Limited, Hamilton, Ont.

1664 MOULDINGS.

Aitchison, D., & Co., Hamilton, Ont.
Anglin, S., & Co., Kingston, Ont.
Big Bend Lumber Co., Limited, Arrowhead, B.C.
Boake Mfg. Co., Limited, The, Toronto, Ont.
*B. C. Mills, Timber & Trading Co., Vancouver, B.C.
Brockville Lumber Co., Limited, Brockville, Ont.
*Brunette Saw Mill Co., Limited, New Westminster, B.C.
*Burrill Lumber Co., The, Shawinigan Falls, Que.
*Carew, John, Lindsay, Ont.
Cargill, H., & Son, Cargill, Ont.
Chalifour, O., Quebec, Que.
Christie Woodworking Co., Limited, The, St. John, N.B.
Cushing Bros. Co., Limited, Calgary, Alta.
Dand, Raymond, New Glasgow, N.S.
Davidson, James, Ottawa, Ont.
Dempster, Jas., & Co., Halifax, N.S.
Dyment-Baker Lumber Co., The, London, Ont.
Eaton, J. R., Orillia, Ont.
Fisher Bros., & Co., Toronto, Ont.
Georgian Bay Shook Mills, Limited, Midland, Ont.
Gignac, J. H., Limited, Quebec, Que.
Gold Medal Furniture Mfg. Co., Limited, Toronto, Ont.
Grant, John J., New Glasgow, N.S.
Grant, Donald, & Son, New Glasgow, N.S.
*Gravel, The A., Lumber Co., Limited, Etchemin Bridge, Que.
Hadley, The S., Lumber Co., Limited, Chatham, Ont.
Hanbury Mfg. Co., The, Brandon, Man.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
Hastings Shingle Mfg. Co., Limited, Vancouver, B.C.
*Heaps, E. H., & Co., Vancouver, B.C., Adv. page 850.)
Itzweire & Sarrasin, Montreal, Que.
Knight Bros. Co., Limited, The, Burk's Falls, Ont.
*Leigh, James, & Sons, Victoria, B.C.
Lemon, Gonnason & Co., Victoria, B.C.
*Matthews Bros., Limited, Toronto, Ont.
Morency, Louis, Quebec, Que.
Murray, G. W., Co., Limited, Winnipeg, Man.
Nesbitt, E. T., Quebec, Que.
Pacific Coast Lumber Mills, Limited, Vancouver, B.C.
Pauze, The U., & Fils Co., Montreal, Que.
*Phillips Mfg. Co., Limited, Toronto, Ont. (Adv. page 1000.)
*Pigeon River Lumber Co., Port Arthur, Ont.
Porto Rico Lumber Co., Limited, Nelson, B.C.
Quance Bros., Delhi, Ont.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
*Robertson & Hackett, Vancouver, B.C.
Robinson-McKenzie Lumber Co., Limited, Cranbrook, B.C.
*Sayward, J. A., Victoria, B.C.
Scott, The J. C., Co., Limited, Toronto, Ont.
Sheppard, James, & Son, Sorel, Que.
*Smith, John B., & Sons, Limited, Toronto, Ont.
Tait & Co., Toronto, Ont.
*Terminal Lumber & Shingle Co., Limited, The, Vancouver, B.C.
*Thorne Mfg. Co., The, Toronto, Ont.
Traversy, V. E., Montreal, Que.
Tremblay, F., & Cie, Montreal, Que.
Wilson Bros., Limited, Collingwood, Ont.
Woodstock Lumber & Mfg. Co., Limited, The, Woodstock, Ont.

1665 MOULDINGS, Picture.

Aitchison, D., & Co., Hamilton, Ont.
*Burrill Lumber Co., The, Shawinigan Falls, Que.
Cushing Bros. Co., Limited, Calgary, Alta.
Eaton, J. R., Orillia, Ont.
Fisher Bros., & Co., Toronto, Ont.
Gold Medal Furniture Mfg. Co., Limited, Toronto, Ont.
*Matthews Bros., Limited, Toronto, Ont.
Morency, Louis, Quebec, Que.
*Phillips Mfg. Co., Limited, Toronto, Ont. (Adv. page 1000.)
Scott, Wm., & Son, Montreal, Que.
*Thorne Mfg. Co., The, Toronto, Ont.
Toronto Picture Frame Co., The, Toronto, Ont.

1666 MOULDS, Brick and Tile.

Baird, H. C., Son & Co., Limited, Parkhill, Ont.
Sawyer & Massey Co., Limited, Hamilton, Ont.

1667 MOULDS, Rubber and Glass.

Augustin & Daudelin, St. Hyacinthe, Que.
*Bawden Machine & Tool Co., Toronto, Ont.
Schofield-Holden Machine Co., Limited, Toronto, Ont.

1668 MOULDS, Solder.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

1669 MOUNTINGS, Carriage.

Carriage Mountings Co., Limited, Niagara Falls, Ont.

1670 MOUNTINGS, Coffin and Casket.

See Hardware, Coffin and Casket.

1671 MOUNTS, Photograph.

*Cameras' Limited, Montreal, Que.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
Ritchie & Ramsay, Limited, Toronto, Ont.

1672 MOWERS.

*Cossitt Co., Limited, The, Brockville, Ont.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
International Harvester Co. of Canada, Limited, Hamilton, Ont. (Adv. page 848.)
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Maxwell, David, & Sons, St. Mary's, Ont.
*Noxon Co., Limited, The, Ingersoll, Ont.
Shantz, P. E., Preston, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.

1673 MOWERS, Lawn.

*Maxwell, David, & Sons, St. Mary's, Ont.
*Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Taylor-Forbes Co., Limited, Guelph, Ont.

1674 MUCILAGE.

Auld Mucilage Co., Montreal, Que.
Domestic Specialty Co., Limited, Hamilton, Ont.
*Gilmour Bros. & Co., Montreal, Que.
*Sultana Mfg. Co., Montreal, Que.
*Underwood, John, & Co., Toronto, Ont.

1675 MUSIC PUBLISHERS AND ENGRAVERS.

See Engravers, Music.

1676 MUSICAL SUPPLIES.

Nordheimer Piano & Music Co., Limited, The, Toronto, Ont.
*Whaley, Royce & Co., Limited, Toronto, Ont.
Williams, The R. S., & Sons Co., Limited, Toronto, Ont.

1677 MUSTARD.

Dalton Bros., Toronto, Ont.
Ewing, S. H., & Sons, Montreal, Que.
*Pure Gold Mfg. Co., Limited, Toronto, Ont.
Quebec Preserving Co., Quebec, Que. (Adv. page 1032.)
Schwartz, W. H., & Sons, Halifax, N.S.
Todhunter, Mitchell & Co., Toronto, Ont.

N

1678 NAILS, Boat.

*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)

1679 NAILS, Canoe (Copper and Steel).

Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)

1680 NAILS, Countersunk Clout.

*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)

1681 NAILS, Cut, all kinds.

Cowan & Britton, Gananoque, Ont.
Graham Nail Works, The, Toronto, Ont.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
Peck Rolling Mills, Limited, The, Montreal, Que.

1682 NAILS, Galvanized.

*Pender, James, & Co., Limited, St. John, N.B.

1683 NAILS, Horseshoe.

*Canada Horse Nail Co., Montreal, Que.
*Capewell Horse Nail Co., The, Toronto, Ont.
*Maritime Nail Co., Limited, St. John, N.B.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Pender, James, & Co., Limited, St. John, N.B.

1684 NAILS, Wire.

Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
Graham Nail Works, The, Toronto, Ont.
*Maritime Nail Co., Limited, St. John, N.B.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)
Peck Rolling Mills, Limited, The, Montreal, Que.

*Pender, James, & Co., Limited, St. John, N.B.
Plessisville, La Fonderie de, Plessisville, Que.
Waterous Wire & Nail Works, Brantford, Ont.
Western Wire & Nail Co., Limited, The, London, Ont.

1685 NAIL SETS, Steel.

Morrow, The John, Screw, Limited, Ingersoll, Ont.

1686 NAME PLATES.

See Plates, Key, Name, etc.

1687 NAPHTHA.

*Dominion Tar & Chemical Co., Limited, Sydney, N.S.
Imperial Oil Co., Limited, The, Montreal, Que.
Queen City Oil Co., Limited, The, Toronto, Ont. (Adv. page 1028.)

1688 NECKWEAR, Ladies'.

Eaton, The T., Co., Limited, Toronto, Ont.
*Fairbairn, Rhys D., Limited, Toronto, Ont.
Flett, Lowndes & Co., Limited, Toronto, Ont.
*Ladies' Wear, Limited, Toronto, Ont.
*Rea, A. E., & Co., Limited, Toronto, Ont.
Reid, The A. T., Co., Limited, Toronto, Ont.
*Stewart, Howe & Meek Co., Limited, The, Toronto, Ont.
*Standard Shirt Mfg. Co., Limited, The, Montreal, Que.
Sword Neckwear Co., Limited, The, Toronto, Ont.

1689 NECKWEAR, Men's.

Canada Neckwear, Limited, Toronto, Ont.
Crescent Mfg. Co., Limited, Montreal, Que.
*Currie, E. & S., Limited, Toronto, Ont.
Eaton, The T., Co., Limited, Toronto, Ont.
Niagara Neckwear Co., Limited, Niagara Falls, Ont.
Reid, The A. T., Co., Limited, Toronto, Ont.
Sword Neckwear Co., Limited, The, Toronto, Ont.

1690 NECK YOKES.

See Yokes, Neck.

1691 NETS, Cricket and Tennis.

Shurly & Derrett, Limited, Toronto, Ont. (Adv. page 845.)

1692 NETS, Fishermen's

Leckie, John, Limited, Toronto, Ont.

1693 NETTING, Wire.

Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
Lysaght, John, Limited, Montreal, Que. (Adv. Inside Back Inner Cover.)
*Munro Wire Works, Limited, New Glasgow, N.S.
*Page Wire Fence Co., Limited, The, Walkerville, Ont.
Western Wire & Nail Co., Limited, The, London, Ont.

1694 NEWELS.

Anglin, S., & Co., Kingston, Ont.
Cargill, H., & Son, Cargill, Ont.
Cushing Bros. Co., Limited, Calgary, Alta.
Davidson, James, Ottawa, Ont.
Dempster, James, & Co., Halifax, N.S.
Gignac, J. H., Limited, Quebec, Que.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
Kerr, J. & J., Co., Limited, Petrolia, Ont.
Lemon, Gonnason & Co., Victoria, B.C.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Rutherford, The Wm., & Sons Co., Montreal, Que.

1695 NEWSPAPERS, Daily.

*Colonist Printing & Publishing Co., Limited, The, Victoria, B.C.
Globe Printing Co., Toronto, Ont.
Halifax Herald, The, Halifax, N.S.
Mail Printing Co., Toronto, Ont.
Montreal Star Publishing Co., Limited, The, Montreal, Que.
News Publishing Co. of Toronto, Limited, The, Toronto, Ont.
Ottawa Citizen Co., Limited, The, Ottawa, Ont.
Patrie Publishing Co., Limited, La, Montreal, Que.
Spectator Printing Co., Limited, The, Hamilton, Ont.

1696 NEWSPAPERS, Ready Printed Sheets.

Canada Ready Print Co., The, Hamilton, Ont.
Griffin & Richmond Co., Limited, The, Hamilton, Ont.

1697 NEWSPAPERS, Trade.

See Trade Publications.

1698 NICKEL-PLATED WARE.

*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
*Garth Co., The, Montreal, Que.
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont.

1699 NIPPLES.

*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

1700 NIPPLES, Rubber.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)

1701 NOTES, Cheques and Drafts.

See Lithographers.

1702 NOVELTIES, Advertising.

Bulman Bros., Limited, Winnipeg, Man.
Canada Leather Goods Co., Montreal, Que.
*Canadian Silk Co., Limited, Toronto, Ont.
*Colonial Weaving Co., Limited, The, Peterborough, Ont.
*Duncan Lithographing Co., Limited, The, Hamilton, Ont.
*Grip, Limited, Toronto, Ont. (Adv. page 1025.)
*Knowles & Co., London, Ont.
*Howell Litho. Co., Limited, Hamilton, Ont.
*Lawson & Jones, Limited, London, Ont.
London Printing & Lithographing Co., The, London, Ont.
*Montreal Lithographing Co., Limited, The, Montreal, Que. (Adv. page 855.)
Pugh Mfg. Co., The, Toronto, Ont.
*Rolph & Clark, Limited, Toronto, Ont. (Adv. page 998.)
*Smith, The David, Engraving & Lithographing Co., Toronto, Ont.
Southam Printing & Litho. Co., Limited, The, London, Ont.
*Toronto Engraving Co., Limited, Toronto, Ont.
*Toronto Lithographing Co., Limited, The, Toronto, Ont.
*Young Bros., Toronto, Ont.

1703 NOVELTIES AND SOUVENIRS, Leather.

Canada Leather Goods Co., Montreal, Que.
*Young Bros., Toronto, Ont.

1705 NOVELTIES, Metal.

Macdonald Mfg. Co., Limited, Toronto, Ont. (Adv. page 857.)
*Thompson, J., & Son, Toronto, Ont.

1706 NOVELTIES, Paper.

Hamilton Paper Box Co., Hamilton, Ont.
*Hand, T. W., Firework Co., Limited, Hamilton, Ont.
*Warwick Bros. & Rutter, Limited, Toronto, Ont.

1707 NOVELTIES, Wooden.

Acme Supply Co., Limited, The, Toronto, Ont.
*Canada Wood Specialty Co., Limted, The, Orillia, Ont.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
*Hurndall Novelty Furniture Co., Limited, Orangeville, Ont.
*Murray & Gregory, Limited, St. John, N.B.
*Sanderson-Harold Co., Limited, Paris, Ont.
*Schultz Bros. Co., Limited, The, Brantford, Ont.
*Williams Mfg. Co., Limited, The, Montreal, Que. (Adv. page 1037.)

1708 NOZZLES, Hose.

Garth Co., The, Montreal, Que.
*McAvity, T., & Sons, St. John, N.B.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
*Wilson & Cousins, Toronto, Ont.

1709 NUTS.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canada Nut Co., Niagara Falls, Ont. (Adv. page 1060.)
Canada Screw Co., Limited, Hamilton, Ont.
London Rolling Mill Co., Limited, London, Ont.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
*Starr Mfg. Co., Limited, Dartmouth, N.S.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

1710 NUTS, Brass and Steel Finished.

Morrow, The John, Screw, Limited, Ingersoll, Ont.

1711 NUTS, Case Hardened, Finished, Semi-finished and Special.

Canada Nut Co., Niagara Falls, Ont. (Adv. page 1060.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.

1712 NUTS, Cold Punched.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.

1713 NUTS, Hot Pressed.

*Montreal Rolling Mills Co., The, Montreal, Que. (Adv. page 842.)
Rhodes, Curry & Co., Limited, Amherst, N.S.
*Starr Mfg. Co., Limited, Dartmouth, N.S.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

1713a NUTS, Turned Steel.

*Canada Nut Co., Niagara Falls, Ont. (Adv. page 1060.)

O

1714 OARS.

*Dean, Walter, Toronto, Ont.
*English, The Wm., Canoe Co., Peterborough, Ont.
*Gidley, H. E., & Co., Penetanguishene, Ont.
*Peterboro Canoe Co., Limited, The, Peterboro, Ont.

1715 OATMEAL AND ROLLED OATS.

*Brackman-Ker Milling Co., Limited, The, Victoria, B.C. (Adv. page 1042.)
*Campbell, The John, Co., Limited, St. Thomas, Ont.
*Canadian Cereal Co., Limited, The, Toronto, Ont.
Dow Cereal & Milling Co., The, Pilot Mound, Man.
*Flavelle Milling Co., Limited, Lindsay, Ont.
*Georgian Bay Milling & Power Co., Limited, Meaford, Ont.
*McCann, Knox Milling Co., Limited, Toronto, Ont.
*McIntosh, P., & Son, Toronto, Ont
*Ogilvie Flour Mills Co., Limited, Montreal, Que.
*Quaker Oats Co., The, Peterboro, Ont.
*Thomson, Walter, & Son, Limited, London, Ont.
*Tillson Co., Limited, Tillsonburg, Ont.
*Western Canada Flour Mills Co., Limited, Toronto, Ont.
*Wilson, James, & Sons, Fergus, Ont.
*Woodstock Cereal Co., Limited, The, Woodstock, Ont.

1716 OCHRES.

*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)

1717 OFFICE FIXTURES.

See Fittings, Wood (Bank, Store and Office).

1718 OFFICE FURNITURE.

See Furniture, Office.

1719 OIL, Cooking and Salad.

*Fairbank, The N. K., Co., Montreal, Que.

1720 OIL, Corn.

*Edwardsburg Starch Co., Limited, Montreal, Que.

1721 OIL, Fish.

*Leonard Bros., Montreal, Que.
*Pendray, W. J., Victoria, B.C.
*Whitman, Arthur N., Halifax, N.S.

1722 OIL, Fuel, Petroleum.

*British American Oil Co., Limited, The, Toronto, Ont.
Canadian Oil Co., Limited, Toronto, Ont.
*Dominion Oil Co., Limited, Hamilton, Ont.
Queen City Oil Co., Limited, The, Toronto, Ont. (Adv. page 1028.)

1723 OIL, Lard.

Crescent Oil Co., The, Hamilton, Ont.
*Freeman, The W. A., Co., Limited, Hamilton, Ont.
Morton, David, & Sons, Limited, Toronto, Ont.
Seward, The L. B., Lubricating Co., Ottawa, Ont.

1,24 OIL, Linseed.

Canada Linseed Oil Mills, Limited, Montreal, Que.
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
Dominion Linseed Oil Co., Limited, Baden, Ont.
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
Jamieson, R. C., & Co., Limited, Montreal, Que.
*Perdray, W. J., Victoria, B.C.

1725 OIL, Lubricating.

*British American Oil Co., Limited, The, Toronto, Ont.
Canadian Oil Co., Limited, Toronto, Ont.
Commercial Oil Co., Limited, The, Hamilton, Ont.
*Crown Oil Refining Co., Limited, Hamilton, Ont.
Crescent Oil Co., The, Hamilton, Ont.
*Dominion Oil Co., Limited, Hamilton, Ont.
Electric Boiler Compound Co., Limited, The, Guelph, Ont.
Imperial Oil Co., Limited, The, Montreal, Que.
*McColl Bros. & Co., Toronto, Ont.
Queen City Oil Co., Limited, The, Toronto, Ont. (Adv. page 1028.)
Seward, The L. R., Lubricating Co., Ottawa, Ont.

1726 OIL, Neatsfoot.

Commercial Oil Co., Limited, The, Hamilton, Ont.
*Dominion Oil Co., Limited, Hamilton, Ont.
Freeman, The W. A., Co., Limited, Hamilton, Ont.
Harris, W., & Co., Toronto, Ont.
*Lawrason, S. F., & Co., London, Ont.
Marquis, F. Canac, Quebec, Que.
Seward, The L. B., Lubricating Co., Ottawa, Ont.

1727 OIL, Oleo.

*Harris Abattoir Co., Limited, The, Toronto, Ont.
*Martin, The D. B., Co., Limited, West Toronto, Ont.

1728 OIL, Refined, Coal or Illuminating.

*British American Oil Co., Limited, The, Toronto, Ont.
Canadian Oil Co., Limited, Toronto, Ont.
*Dominion Oil Co., Limited, Hamilton, Ont.
Imperial Oil Co., Limited, The, Montreal, Que.
*McColl Bros. & Co., Toronto, Ont.
Queen City Oil Co., Limited, The, Toronto, Ont. (Adv. page 1028.)

1729 OIL, Timber Preserving.

*Dominion Tar & Chemical Co., Limited, The, Sydney, N.S.

1730 OIL, Wood Tar.

*Standard Chemical Co. of Toronto, Limited, The, Toronto, Ont. (Adv. page 1032.)

1731 OIL CAKE, Linseed.

Canada Linseed Oil Mills, Limited, Montreal, Que
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
*Dominion Linseed Oil Co., Limited, Baden, Ont.

1732 OILCLOTH, Floor, Table, Stair, Carriage and enameled.

Dominion Oil Cloth Co., Limited, The, Montreal, Que.

1733 OILERS, Machine.

Booth Copper Co., Limited, The, Toronto, Ont.
Kemp Mfg. Co., Toronto, Ont.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Penberthy Injector Co., Limited, Windsor, Ont. (Adv. page 865.)
*Wright, E. T., & Co., Hamilton, Ont.

1734 OILING DEVICES.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Penberthy Injector Co., Limited, Windsor, Ont. (Adv. page 865.)

1735 OIL WELL SUPPLIES.

Kerr, J. & J., Co., Limited, Petrolia, Ont.

1736 OINTMENT, Hoof.

Nonsuch Mfg. Co., Limited, The, Toronto, Ont.

1737 OPENERS, Bottle.

Aluminum & Crown Stopper Co., Toronto, Ont.

1738 OPENERS, Can.

*Acme Can Works, Montreal, Que.
*Cumming Mfg. Co., Limited, The, Renfrew, Ont.
Montreal Hardware Mfg. Co., Limited, The, Montreal, Que.
Taylor-Forbes Co., Limited, Guelph, Ont.

1739 OPTICAL MATERIALS.

*Consolidated Optical Co., Limited, Toronto, Ont.

1740 ORE, Antimony.

Dominion Antimony Co., Limited, Halifax, N.S.

1741 ORES, Gold, Silver and Copper.

Granby Consolidated Mining, Smelting & Power Co., Limited, Grand Forks, B.C.

1742 ORE, Iron.

Mineral Range Iron Mining Co., Limited, The, Bessemer, Ont.
*Nova Scotia Steel & Coal Co., Limited, New Glasgow, N.S. (Adv. page 870.)

1743 ORGANS, Parlor, Lodge, Church and School.

*Bell Piano & Organ Co., Limited, The, Guelph, Ont.
*Doherty, W., & Co., Clinton, Ont.
*Dominion Organ & Piano Co., Limited, The, Bowmanville, Ont.
*Goderich Organ Co., Limited, The, Goderich, Ont.
*Karn Piano & Organ Co., Limited, Woodstock, Ont.
*Palmer Piano Co., Limited, The, Toronto, Ont.
Sherlock-Manning Organ Co., The, London, Ont.
*Thomas Organ & Piano Co., Woodstock, Ont.

1744 ORGANS, Pipe.

*Breckels & Matthews, Toronto, Ont.
Casavant Freres, St. Hyacinthe, Que. (Adv. page 1025.)
*Hay & Co., Woodstock, Ont.
*Karn Piano & Organ Co., Limited, Woodstock, Ont.
*Palmer Piano Co., Limited, The, Toronto, Ont.
*Sherlock-Manning Organ Co., The, London, Ont.

1745 ORGAN REEDS, Reed Boards and Keys.

*Higel, The Otto, Co., Limited, Toronto, Ont.

1746 ORNAMENTS, Millinery, Dress and Military.

Dominion Cord & Tassel Co., The, Montreal, Que.
Moulton & Co., Montreal, Que.
*Peters, J. Henry, Co., Toronto, Ont.
Textile Trimmings Co., The, Toronto, Ont.

1747 ORNAMENTS, Pressed Zinc.

*Metallic Roofing Co. of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995.)
*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)

1748 OUTFITTERS, Children's.

*Knox Mfg. Co., Toronto, Ont.

1749 OVENS.

Fletcher Mfg. Co., Limited, Toronto, Ont.
Gardner, Robert, & Son, Montreal, Que. (Adv. page 1043.)

1750 OVERALLS.

Braime, T. E., & Co., Limited, Toronto, Ont.
*Chalcraft, W. E., & Co., Limited, Toronto, Ont.
Clayton & Sons, Halifax, N.S.
Goodhue, J. B., Rock Island, Que.
Henderson Mfg. Co., The, Winnipeg, Man.
*Levy, H., & Sons, Limited, Montreal, Que.
London Pant, Overall & Shirt Mfg. Co., Limited, London, Ont.
Piercy, J., & Co., Victoria, B.C.
*Standard Shirt Mfg. Co., Limited, Montreal, Que.
*Turner, Beeton & Co., Limited, Victoria, B.C.
Wilkins, Robert C., Montreal, Que.
*Woods, Limited, Ottawa, Ont.

1751 OVERSHOES.

*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)
Jacobi, Philip, Toronto, Ont.
*Maple Leaf Rubber Co., Limited, The, Port Dalhousie, Ont.

1752 OXIDES.

*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
*Ramsay, A., & Son Co., Montreal, Que

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1753 PACKINGS.

*Canadian Asbestos Co., Montreal, Que.
*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. inside back cover.)
Crescent Oil Co., The, Hamilton, Ont.
Electric Boiler Compound Co., Limited, The, Guelph, Ont.
Eureka Mineral Wool & Asbestos Co., Toronto, Ont. (Adv. page 1012.)
*Garlock Packing Co., The, Hamilton, Ont.
Hamilton Engine Packing Co., Hamilton, Ont.
Jenkins Bros., Limited, Montreal, Que.
*McColl Bros. & Co., Toronto, Ont.
Wing, J. T., & Co., Windsor, Ont.

1754 PACKING, Asbestos.

*Canadian Asbestos Co., Montreal, Que.
*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. inside back cover.)
Eureka Mineral Wool & Asbestos Co., Toronto, Ont. (Adv. page 1012.)
Hamilton Engine Packing Co., Hamilton, Ont.

1755 PACKING, Rubber.

*Canadian Asbestos Co., Montreal, Que.
*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. inside back cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv page 1018.)
Durham Rubber Co., Limited, Bowmanville, Ont. (Adv. page 844.)
Eureka Mineral Wool & Asbestos Co., Toronto, Ont. (Adv. page 1012.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. inside back inner cover.)

1756 PADDING, Coat, Table, Stair, etc.

Lazier Paper Mills, Limited, Belleville, Ont.
Montreal Quilting Co., Limited, The, Montreal, Que.
*Smart Bag Co., Limited, The, Montreal, Que. (Adv. page 836.)

1757 PADDLES, Canoe.

*Dean, Walter, Toronto, Ont.
*English, The Wm., Canoe Co., Peterborough, Ont.
*Ross, Henry, Indian Lorette, Que.

1758 PADS (Air Cushion), Horseshoe.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)

1759 PADS, Sweat.

Adams Bros. Harness Mfg. Co., Limited, Toronto, Ont.

1760 PAILS, Fibre.

Eddy, The E. B., Co., Limited, Hull, Que.

1761 PAILS, Galvanized.

Aubry, A., & Fils, Montreal, Que.
Kemp Mfg. Co., Toronto, Ont.

1762 PAILS, Paper (ice cream and Oyster).

Dominion Paper Box Co., Limited, Toronto, Ont.

1763 PAILS, Sap.

Grimm Mfg. Co., The, Montreal, Que.

1764 PAILS, Tin (lard, paint, etc).

*Acme Can Works, Montreal, Que.
Aubry, A., & Fils, Montreal, Que.
Kemp Mfg. Co., Toronto, Ont.
Macdonald Mfg. Co., Limited, Toronto, Ont. (Adv. page 857.)
Norton Mfg. Co., The, Hamilton, Ont.

1765 PAILS, Wooden (lard, candy, etc).

Eddy, The E. B., Co., Limited, Hull, Que.
Keenan Woodenware Mfg. Co., Limited, Owen Sound, Ont.
United Factories, Limited, Toronto, Ont. (Adv. page 1023.)

1766 PAINT, Bridge, Girder, etc.

*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
Crescent Oil Co., The, Hamilton, Ont.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
*Staneland Co., Limited, The, Victoria, B.C.

1767 PAINT, Carbon.

Commercial Oil Co., Limited, The, Hamilton, Ont.
*Staneland Co., Limited, The, Victoria, B.C.

1768 PAINT, Copper.

*Brandram Henderson, Limited, Montreal, Que. (Adv. page 840.)
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
*Pendray, W. J., Victoria, B.C.

1769 PAINT, Gold and Aluminum.

*Brandram-Henderson, Limited, Montreal, Que. (Adv. page 840.)
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
Domestic Specialty Co., Limited, Hamilton, Ont.
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
*Martin Senour Co., Limited, The, Montreal, Que.
*Moore, Benjamin & Co., Limited, West Toronto, Ont.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
*Staneland Co., Limited, The, Victoria, B.C.

1770 PAINTS, Ground in Oil.

*Brandram-Henderson, Limited, Montreal, Que. (Adv. page 840.)
*Canada Paint Co., Limited, Montreal, Que. (Adv. page 1027.)
Dods, P. D., & Co., Montreal, Que.
Muirhead, A., Toronto, Ont.
*Pendray, W. J., Victoria, B.C.
*Staneland Co., Limited, The, Victoria, B.C.

1771 PAINT, Mixed.

*Brandram-Henderson, Limited, Montreal, Que. (Adv. page 840.)
Canadian Oil Co., Limited, Toronto, Ont.
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
*Crown Oil Refining Co., Limited, Hamilton, Ont.
Dods, P. D., & Co., Montreal, Que.
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
Jamieson, R. C., & Co., Limited, Montreal, Que
Langmuir, James, & Co., Limited, Toronto, Ont.
McArthur, Corneille & Co., Montreal, Que
*Moore, Benjamin, & Co., Limited, West Toronto, Ont.
*McColl Bros. & Co., Toronto, Ont.
*Pendray, W. J., Victoria, B.C.
*Ramsay, A., & Son Co., Montreal, Que.
Robertson, The James, Co., Limited, Montreal, Que.
Sherwin-Williams Co., The, Montreal Que.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
*Staneland Co., Limited, The, Victoria, B.C.
Stephens, G. F., & Co., Limited, Winnipeg, Man.
Winnipeg Paint & Glass Co., Limited, The, Winnipeg, Man.

1772 PAINT, Railway, Ship and House.

*Brandram-Henderson, Limited, Montreal, Que. (Adv. page 840.)
*Canada Paint Co., Limited, Montreal, Que. (Adv. page 1027.)
Dods, P. D., & Co., Montreal, Que.
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
Jamieson, R. C., & Co., Limited, Montreal, Que.
Langmuir, James, & Co., Limited, Toronto, Ont.
*Martin Senour Co., Limited, The, Montreal, Que.
Muirhead, A., Toronto, Ont.
*Pendray, W. J., Victoria, B.C.
*Ramsay, A., & Son Co., Montreal, Que.
Sherwin-Williams Co., The, Montreal, Que.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
*Staneland Co., Limited, The, Victoria, B.C.

1773 PAINT, Roofing.

Bird, F. W., & Son, Hamilton, Ont.
*Brantford Roofing Co., Limited, Brantford, Ont.
*Standard Paint Co. of Canada, Limited, The, Montreal, Que.
*Staneland Co., Limited, The, Victoria, B.C.

1774 PANS, Bakers' and Confectioners'.

Booth Copper Co., Limited, The, Toronto, Ont.
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Fletcher Mfg. Co., Limited, Toronto, Ont.
Gardner, Robert & Son, Montreal, Que. (Adv. page 1043.)
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Macnab & Roberts, Limited, Winnipeg, Man.

1775 PANS (Frying), and Spiders.

*Amherst Foundry Co., Limited, The, Amherst, N.S. (Adv. page 849.)
Aubry, A., & Fils, Montreal, Que.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Kemp Mfg. Co., Toronto, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

1776 PANS, Kneading.

Aubry, A., & Fils, Montreal, Que.

1777 PANTS, Rubber.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)

1778 PANTS, Tweed, Denim and Duck.

Braime, T. E., & Co., Limited, Toronto, Ont.
Carss Mackinaw Clothing Co., Orillia, Ont.
Chalcraft, W. E., & Co., Limited, Toronto, Ont.
Goodhue, J. B., Rock Island, Que.
Henderson Mfg. Co., The, Winnipeg, Man.
*Levy, H., & Sons, Limited, Montreal, Que.
London Pant, Overall & Shirt Mfg. Co., Limited, London, Ont.
*Turner, Beeton & Co., Limited, Victoria, B.C.
Wilkins, Robert C., Montreal, Que.
*Woods, Limited, Ottawa, Ont.

1779 PAPER, Blue and Black Print.

Hughes Owens Co., Limited, The, Montreal, Que.

1780 PAPER, Book.

Barber, Wm., & Bros., Limited, Georgetown, Ont. (Adv. page 852.)
Canada Coating Mills, Limited, Georgetown, Ont.
*Canada Paper Co., Limited, Windsor Mills, Que.
Eddy, The E. B., Co., Limited, Hull, Que.
Fisher, John, & Son, Limited, Dundas, Ont.
*Gage, W. J., & Co., Limited, Toronto, Ont.
*Kinleith Paper Co., Limited, St. Catharines, Ont.
*Montrose Paper Co., Limited, The, Thorold, Ont.
*Northern Mills Co., The, Montreal, Que. (Adv. page 847.)
Ritchie & Ramsay, Limited, Toronto, Ont.
*St. Raymond Paper Co., Limited, Montreal, Que.
*Smith, Howard, Paper Co., Limited, Montreal, Que.
Toronto Paper Mfg. Co., The, Cornwall, Ont. (Adv. page 856.)

1781 PAPER, Building.

Bird, F. W., & Son, Hamilton, Ont.
*Dominion Paper Co., Montreal, Que.
Eureka Mineral Wool & Asbestos Co., Toronto, Ont. (Adv. page 1012.)
Ford, Jos., & Co., Portneuf Station, Que.
Fisher, John, & Son, Limited, Dundas, Ont.
Lockerby & McComb, Montreal, Que. (Adv. page 1047.)
*McArthur, Alex., & Co., Limited, Montreal, Que. (Adv. page 1040.)
*Merrick-Anderson Co., Winnipeg, Man.
*Montreal Paper Co., St. Basile, Que.
Northumberland Paper & Electric Co., Limited, The, Campbellford, Ont.
Paterson Mfg. Co., Limited, The, Toronto, Ont.
Riordon Paper Mills, Limited, The, Montreal, Que. (Adv. page 1046.)
St. Croix Paper Co., Limited, Halifax, N.S.
Sault Ste. Marie Pulp & Paper Co., Limited, Sault Ste. Marie, Ont.
*Walker, J. R., & Co., Montreal, Que. (Adv. page 846.)

1782 PAPER, Carbon.

*Ault & Wiborg Co., of Canada, Limited, The, Toronto, Ont.
*Carbon Paper & Ribbon Mfg. Co., Limited, Toronto, Ont.
*Underwood, John, & Co., Toronto, Ont.
*United Typewriter Co., Limited, Toronto, Ont. (Adv. page 1032.)

1783 PAPER, Coated and Enamelled.

Canada Coating Mills, Limited, Georgetown, Ont.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
Ritchie & Ramsay, Limited, Toronto, Ont.

1784 PAPER, Colored.

Barber, Wm., & Bros., Limited, Georgetown, Ont. (Adv. page 852.)
Eddy, The E. B., Co., Limited, Hull, Que.
Lincoln Paper Mills Co., Limited, The, Merritton, Ont.
*McArthur, Alex., & Co., Limited, Montreal, Que. (Adv. page 1040.)
Toronto Paper Mfg. Co., The, Cornwall, Ont. (Adv. page 856.)

1785 PAPER, Corrugated.

Elliott Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 863.)
Martin Corrugated Paper & Box Co., Limited, The, Toronto, Ont.

1786 PAPER, Cover.

Barber, Wm., & Bros., Limited, Georgetown, Ont. (Adv. page 852.)
Eddy, The E. B., Co., Limited, Hull, Que.
*Kinleith Paper Co., Limited, St. Catharines, Ont.
*Montrose Paper Co., Limited, The, Thorold, Ont.
Ritchie & Ramsay, Limited, Toronto, Ont.
*Smith, Howard, Paper Co., Limited, Montreal, Que.
*St. Raymond Paper Co., Limited, Montreal, Que.
Toronto Paper Mfg. Co., The, Cornwall, Ont. (Adv. page 856.)

1787 PAPER, Envelope.

Barber, Wm., & Bros., Limited, Georgetown, Ont. (Adv. page 852.)
Eddy, The E. B., Co., Limited, Hull, Que.
*Kinleith Paper Co., Limited, St. Catharines, Ont.
Lincoln Paper Mills Co., Limited, The, Merritton, Ont.
*Montrose Paper Co., Limited, The, Thorold, Ont.
*Northern Mills Co., The, Montreal, Que. (Adv. page 847.)
Toronto Paper Mfg. Co., The, Cornwall, Ont. (Adv. page 856.)
Rolland Paper Co., The, Montreal, Que. (Adv. page 849.)

1788 PAPER, Fly.

Briggs, G. C., & Son, Hamilton, Ont.
Stearns, Frederick, & Co., Windsor, Ont.
*Thum, The O. & W., Co., Walkerville, Ont. (Adv. page 1048.)

1789 PAPER, glazed.

Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)

1790 PAPER, gummed.

Ritchie & Ramsay, Limited, Toronto, Ont.

1791 PAPER, Insulating and Sheathing.

Bird, F. W., & Son, Hamilton, Ont.
*Standard Paint Co. of Canada, Limited, The, Montreal, Que.

1792 PAPER, Label.

Barber, Wm., & Bros., Limited, Georgetown, Ont. (Adv. page 852.)

1793 PAPER, Litho.

Barber, Wm., & Bros., Limited, Georgetown, Ont. (Adv. page 852.)
*Kinleith Paper Co., Limited, St. Catharines, Ont.
*Montrose Paper Co., Limited, Thorold, Ont.
*Northern Mills Co., The, Montreal, Que. (Adv. page 847.)
Toronto Paper Mfg. Co, The, Cornwall, Ont. (Adv. page 856.)

1794 PAPER, News.

Barber, Wm., & Bros., Limited, Georgetown, Ont. (Adv. page 852.)
*Belgo-Canadian Pulp & Paper Co., Limited, Shawinigan Falls, Que.
*Booth, J. R., Ottawa, Ont.
*Canada Paper Co., Limited, Windsor Mills, Que.
*Dominion Paper Co., Montreal, Que.
Eddy, The, E. B., Co., Limited, Hull, Que.
Ford, Jos., & Co., Portneuf Station, Que.
*Laurentide Paper Co., Limited, The, Grand Mere, Que.
Lincoln Paper Mills Co., Limited, The, Merritton, Ont
*McArthur, Alex., & Co., Limited, Montreal, Que. (Adv. page 1040.)
Riordon Paper Mills, Limited, The, Montreal, Que. (Adv. page 1046.)
*St. Raymond Paper Co., Limited, Montreal, Que.

1795 PAPER, Photographic.

*Cameras, Limited, Montreal Que.
Canadian Kodak Co., Limited, Toronto, Ont. (Adv. page 1030.)
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)

1796 PAPER, Stencil.

*Carbon Paper & Ribbon Mfg. Co., Limited, Toronto, Ont.

1797 PAPER, Tag, Tissue, and Bag.

Lincoln Paper Mills Co., Limited, The, Merritton, Ont.

1798 PAPER, Tarred.

Sault Ste. Marie Pulp & Paper Co., The, Sault Ste. Marie, Ont.

1799 PAPER, Toilet.

*Dominion Paper Co., Montreal, Que.
Eddy, The E. B., Co., Limited, Hull, Que.
Fisher, John, & Son, Limited, Dundas, Ont.
*Reason, H. T., & Co., London, Ont.
Wilson, The J. C., & Co., Limited, Montreal, Que.

1800 PAPER, Typewriter.

Buntin, Gillies & Co., Limited, Hamilton, Ont.
Eddy, The E. B., Co., Limited, Hull, Que.
*Northern Mills Co., The, Montreal, Que. (Adv. page 847.)
Rolland Paper Co., The, Montreal, Que. (Adv. page 849.)
Toronto Paper Mfg. Co., The, Cornwall, Ont. (Adv. page 856.)

1801 PAPER, Wall or Hanging.

*Boxer, The Reg. N., Co., Limited, Toronto, Ont.
Granger Freres, Montreal, Que.
*McArthur, Colin, & Co., Inc., Montreal, Que.
*Stauntons, Limited, Toronto, Ont. (Adv. page 1034.)
*Watson, Foster Co., Limited, The, Montreal, Que. (Adv. page 855.)

1802 PAPER, Wall or Hanging (unprinted).

Ford, Joseph, & Co., Portneuf Station, Que.

*McArthur, Alex., & Co., Limited, Montreal, Que. (Adv. page 1040.)
Riordon Paper Mills, Limited, The, Montreal, Que. (Adv. page 1046.)
*St. Raymond Paper Co., Limited, Montreal, Que.

1803 PAPER, Waxed.

Bradshaw, I. D., & Co., Toronto, Ont.
Fisher, John, & Son, Limited, Dundas, Ont.

1804 PAPER, Wrapping and Manilla.

*Canada Paper Co., Limited, Windsor Mills, Que.
*Dominion Paper Co., Montreal, Que.
Eddy, The E. B., Co., Limited, Hull, Que.
Fisher, John, & Son, Limited, Dundas, Ont.
Ford, Jos., & Co., Portneuf Station, Que.
Lazier Paper Mills, Limited, Belleville, Ont.
Lincoln Paper Mills Co., Limited, The, Merritton, Ont.
*McArthur, Alex., & Co., Limited, Montreal, Que. (Adv. page 1040.)
*Montreal Paper Co., St. Basile, Que.
Riordon Paper Mills, Limited, The, Montreal, Que. (Adv. page 1046.)
St. Croix Paper Co., Limited, Halifax, N.S.
*St. Raymond Paper Co., Limited, Montreal, Que.
Sault Ste. Marie Pulp & Paper Co., The, Sault Ste. Marie, Ont.
Wilson, The J. C., & Co., Limited, Montreal, Que.

1805 PAPER, Writing and Ledger.

Buntin, Gillies & Co., Limited, Hamilton, Ont.
Dawson, W. V., & Co., Montreal, Que.
Eddy, The E. B., Co., Limited, Hull, Que.
*Gage, W. J., & Co., Limited, Toronto, Ont.
*Kinleith Paper Co., Limited, St. Catharines, Ont.
*Montrose Paper Co., Limited, The, Thorold, Ont.
*Northern Mills Co., The, Montreal, Que. (Adv. page 847.)
Rolland Paper Co., The, Montreal, Que. (Adv. page 849.)
*St. Raymond Paper Co., Limited, Montreal, Que.
*Smith, Howard, Paper Co., Limited, Montreal, Que.
Toronto Paper Mfg. Co., The, Cornwall, Ont. (Adv. page 856.)

1806 PAPER GOODS.

*Paper Goods Co., Limited, The, Toronto, Ont.

1807 PAPETERIES.

Barber & Ellis Co., Limited, The, Toronto, Ont. (Adv. page 1046.)
Buntin, Gillies & Co., Limited, Hamilton, Ont.
Copp, Clark Co., Limited, The, Toronto, Ont.
Dawson, W. V., & Co., Montreal, Que.
*Gage, W. J., & Co., Limited, Toronto, Ont.
*Reason, H. T., & Co., London, Ont.
*Warwick Bros. & Rutter, Limited, Toronto, Ont.

1808 PARASOLS AND SUN-SHADES.

*Dominion Umbrella Factory, The, Montreal, Que.
*Irving Umbrella Co., Limited, The, Toronto, Ont.

1809 PARIS GREEN.

*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
Sherwin-Williams Co., The, Montreal, Que.

1810 PARTITIONS, Fireproof.

*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)

1811 PARTITIONS, Rolling.

Rhodes, Curry & Co., Limited, Amherst, N.S.

1812 PASTE, Cocoanut Caramel.

*Downey, W. P., Montreal, Que.

1813 PASTE, Photo, Etc.

Domestic Specialty Co., Limited, Hamilton, Ont.
*Gilmour Bros. & Co., Montreal, Que.
*Underwood, John, & Co., Toronto, Ont.

1814 PATTERN MAKERS.

*Galt Malleable Iron Co., Limited, Galt, Ont. (Adv. page 1027.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
*Stevens Co. of Galt, Limited, The, Galt, Ont. (Adv. page 1003.)

1815 PATTERNS, Rug.

*Garrett, John E., New Glasgow, N.S.

1816 PEAS, Split.

*Campbell, The John, Co., Limited, St. Thomas, Ont.
*Canadian Cereal Co., Limited, Toronto, Ont.
McCann, Knox Milling Co., Limited, Toronto, Ont.
*McIntosh, P., & Son, Toronto, Ont.
*Murton, H., Guelph, Ont.
*Thomson, Walter, & Son, Limited, London, Ont.
*Tillson Co., Limited, The, Tillsonburg, Ont.
*Wilson, James, & Sons, Fergus, Ont.
*Woodstock Cereal Co., Limited, The, Woodstock, Ont.

1817 PEAVEYS.

*McFarlane-Neill Mfg. Co., Limited, St. Mary's, N.B.
*Pink, Thomas, Pembroke, Ont.
Warnock, The James, Co., Limited, Galt, Ont.

1818 PEDESTALS, Church and Lodge-room.

*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042.)

1819 PEELS, Bakers'

*Fletcher Mfg. Co., Limited, Toronto, Ont.

1820 PEGS, Shoe.

Chalifour, O., Quebec., Que.

1821 PEGS AND TOGGLE, Tent.

Canada Spool & Bobbin Co., Limited, Walkerton, Ont.

1822 PENCILS, Slate.

*Steward, D. M., Mfg. Co., of Canada, Limited, Toronto, Ont.

1823 PENSTOCKS.

Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)

1824 PERFUMERY.

Granger Freres, Montreal, Que.
Lyman Bros. & Co., Limited, The, Toronto, Ont. (Adv. page 1047.)
Lyman, Sons & Co., Montreal, Que.
*Royal Crown, Limited, The, Winnipeg, Man.
*Seely Mfg. Co., Windsor, Ont.
*Sovereign Perfumes, Limited, Toronto, Ont.
Stearns, Frederick, & Co., Windsor, Ont.
*Taylor, John, & Co., Toronto, Ont.

1825 PETROLEUM AND ITS PRODUCTS.

*British-American Oil Co., Limited, The, Toronto, Ont.
*Crown Oil Refining Co., Limited, Hamilton, Ont.
*Dominion Oil Co., Limited, Hamilton, Ont.
Englehart, J. L., & Co., Petrolia, Ont.
Imperial Oil Co., Limited, The, Montreal, Que.
Queen City Oil Co., Limited, The, Toronto, Ont. (Adv. page 1028.)

1826 PEWS.

Anglin, S., & Co., Kingston, Ont.
*Canadian Office & School Furniture Co., Limited, Preston, Ont.
Christie Woodworking Co., Limited, The, St. John, N.B.
*Cushing Bros., Co., Limited, Calgary, Alta.
*Globe Furniture Co., Limited, The, Walkerville, Ont. (Adv. page 865.)
Rathbun Co., The, Deseronto, Ont.
*Rhodes, Curry & Co., Limited, Amherst, N.S.
*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042.)

1827 PHAETONS AND TRAPS.

*Armstrong, The J. B., Mfg. Co., Limited, Guelph, Ont. (Adv. page 996.)
*Brantford Carriage Co., Limited, The, Brantford, Ont.
*Canada Carriage Co., The, Brockville, Ont.
*Gray, The Wm., & Sons Co., Limited, Chatham, Ont.
*McLaughlin Carriage Co., Limited, Oshawa, Ont.
*Munro & McIntosh Carriage Co., Limited, The, Alexandria, Ont.
*Tudhope Carriage Co., Limited, The, Orillia, Ont.

1828 PHARMACEUTICAL PREPARATIONS.

*Chemical Laboratories, Limited, Toronto, Ont.
*Frosst, Charles E., & Co., Montreal, Que.
Lyman Bros. & Co., Limited, The, Toronto, Ont. (Adv. page 1047.)
Lyman, Sons & Co., Montreal, Que.
*National Drug & Chemical Co. of Canada, Limited, Montreal, Que.
*Parke, Davis & Co., Walkerville, Ont.
Saunders, W. E., & Co., London, Ont.
Stearns, Frederick, & Co. Windsor, Ont.
Toronto Pharmacal Co., Limited, The, Toronto, Ont.

1829 PHOSPHATES.

Canada Chemical Mfg. Co., Limited, The, London, Ont. (Adv. page 1033).
Capelton Chemical & Fertilizer Co., Buckingham, Que.
Nichols Chemical Co. of Canada, Limited, The, Montreal, Que. (Adv. page 1045.)

1830 PHOTO MATERIALS.

Canadian Kodak Co., Limited, Toronto, Ont. (Adv. page 1030.)
*Cameras, Limited, Montreal, Que.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)

1831 PIANOS.

*Bell Piano & Organ Co., Limited, The, Guelph, Ont.
Craig Piano Co., The, Montreal, Que. (Adv. page 1030.)
*Doherty, W., & Co., Clinton, Ont.
*Dominion Organ & Piano Co., Limited, The, Bowmanville, Ont.
Evans Bros. Piano & Mfg. Co., Limited, Ingersoll, Ont.
*Foster-Armstrong Co., Toronto, Ont.
*Gourlay, Winter & Leeming, Toronto, Ont. (Adv. page 1062.)
*Hay & Co., Woodstock, Ont.
Heintzman, Gerhard, Limited, Toronto, Ont.
Heintzman & Co., Limited, Toronto, Ont.
*Karn Piano & Organ Co., Limited, Woodstock, Ont.
*Martin-Orme Piano Co., Limited, The, Ottawa, Ont.
Mason & Risch Piano Co., Limited, The, Toronto, Ont.
*Mendelssohn Piano Co., Toronto, Ont.
Morris Piano Co., Limited, The, Listowel, Ont.
*Newcombe Piano Co., Limited, The, Toronto, Ont.
Nordheimer Piano & Music Co., Limited, The, Toronto, Ont.
*Palmer Piano Co., Limited, The, Toronto, Ont.
Stanley, Frank, Toronto, Ont.
*Thomas Organ & Piano Co., Woodstock, Ont.
*Williams Piano Co., Limited, The, Oshawa, Ont. (Adv. page 1021.)

1832 PIANO ACTIONS.

See Actions, piano.

1833 PIANO BENCHES AND STOOLS.

See Stools, piano and organ.

1834 PIANO DAMPERS.

See Dampers, piano.

1835 PIANO KEYS.

See Keys, piano.

1836 PIANO PLAYERS.

See Playerpianos.

1837 PIANO SUPPLIES.

*Best, D. M., & Co., Toronto, Ont.
*Higel, The Otto, Co., Limited, Toronto, Ont.

1838 PICKER-STICKS.

Canada Spool & Bobbin Co., Limited, Walkerton, Ont.
*Canada Wheel Works, Limited, The, Merritton, Ont.
*Lachute Shuttle Co., Limited, Lachute Mills, Que.

1839 PICKETS, Fence.

*Andre Cushing & Co., St. John, N.B. (Adv. page 852.)
Christie Woodworking Co., Limited, The, St. John, N.B.
Cushing Bros. Co., Limited, Calgary, Alta.
Gignac, J. H., Limited, Quebec, Que.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
*Metis Lumber Co., The, Price, Que.
*Murray & Gregory, Limited, St. John, N.B.
Rathbun Co., The, Deseronto, Ont.
*Victoria Lumber & Mfg. Co., Limited, Chemainus, B.C.

1840 PICKLES.

Blackwood's, Limited, The, Winnipeg, Man.
Canadian Vinegar Co., The, Montreal, Que.
*Davies, The Wm., Co., Limited, Toronto, Ont.
Dyson Co., The, Winnipeg, Man.
Lytle, The T. A., Co., Limited, Toronto, Ont.
Northland Mfg. Co., The, Toronto, Ont.
Quebec Preserving Co., Quebec, Que. (Adv. page 1032.)
Ozo Co., Limited, The, Montreal, Que.
Taylor & Pringle Co., Limited, Owen Sound, Ont.
White Star Mfg. Co., The, Winnipeg, Man.

1841 PICKS.

*Bailey-Underwood Co., Limited, New Glasgow, N.S.
*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
*Cumming, J. W., New Glasgow, N.S.
Warnock, James, Co., Limited, Galt, Ont.
*Welland Vale Mfg. Co., Limited, The, St. Catharines, Ont. (Adv. page 1040.)

*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

1842 PIERS, Iron and Steel.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Bridge Co., Limited, The, Walkerville, Ont. (Adv. page 1044.)
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Phoenix Bridge & Iron Works, Limited, The, Montreal, Que.
Stratford Bridge & Iron Works Co., Stratford, Ont.

1843 PILES, Wood.

Booth, J. R., Ottawa, Ont.
Columbia River Lumber Co., Limited, Golden, B.C.
East Kootenay Lumber Co., Limited, Cranbrook, B.C.
Shawinigan Lake Lumber Co., Limited, The, Victoria, B.C.
Trenholme, T. A., Montreal, Que.
Yale Columbia Lumber Co., Limited, Nakusp, B.C.

1844 PILLOWS.

Alaska Feather & Down Co., Limited, Montreal, Que. (Adv. page 860.)
B. C. Bedding & Upholstery Co., Limited, Vancouver, B.C.
*Canadian Feather & Mattress Co., Limited, Toronto, Ont.
Edmonton Tent & Mattress Co., Limited, Edmonton, Alta.
*Gale, Geo., & Sons, Waterville, Que.
*Munro Wire Works, Limited, New Glasgow, N.S.
*Toronto Bedding Co., Limited The, Toronto, Ont.
Whitworth & Restall, Toronto, Ont.

1845 PILLS.

*Parke, Davis & Co., Walkerville, Ont.
Stearns, Frederick, & Co., Windsor, Ont.

1846 PINS, Bowling Alley.

See Beds and Pins, bowling alley.

1847 PINS, Clothes.

United Factories, Limited, Toronto, Ont. (Adv. page 1023.)

1848 PINS, Cotter.

Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)

1849 PINS, Crank.

Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

1850 PINS, Drift.

*Canadian Billings & Spencer, Limited, Welland, Ont. (Adv. page 1031.)

1851 PINS, Milled Shoulder, Threaded and Taper.

Morrow, The John, Screw, Limited, Ingersoll, Ont.
*Pratt & Whitney Co. of Canada, Limited, Dundas, Ont. (Adv. page 828.)

1852 PINS, Opener and cut-off for paper manufacturers.

Canada Spool & Bobbin Co., Walkerton, Ont.

1853 PINS, Rolling.

United Factories, Limited, Toronto, Ont. (Adv. page 1023.)

1854 PINS, Toilet and Safety.

*Montreal Suspender & Umbrella Mfg. Co., Montreal, Que.

1855 PIPE AND BOILER COVERINGS.

See Coverings, pipe and boiler.

1856 PIPE, Brass and Copper.

Booth Copper Co., Limited, The, Toronto, Ont.
*Canadian Seamless Wire Co., Limited, Toronto, Ont.
*Coulter, Wm., & Sons, Toronto, Ont.
*Garth Co., The, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
*Standard Contracting Co., Limited, Toronto, Ont.

1857 PIPE, Cast iron.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Canadian Iron & Foundry Co., Limited, Montreal, Que. (Adv. page 827.)
Gartshore-Thomson Pipe & Foundry Co., Limited, The, Hamilton, Ont.
*Gurney Foundry Co., Limited, The, Toronto, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Mount Royal Foundry Co., Limited, The, Montreal, Que.
Somerville, Limited, Toronto, Ont. (Adv. Outside Back Cover.)
*Vogel, H. G., Co., Montreal, Que. (Adv. page 1038.)
*Warden King, Limited, Montreal, Que.

1858 PIPE, Conductor.

Aubry, A., & Fils, Montreal, Que.
Kemp Mfg. Co., Toronto, Ont.
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co. of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.
Wheeler & Bain, Toronto, Ont.
Winnipeg Ceiling & Roofing Co., Winnipeg, Man.
*Wright, E. T., & Co., Hamilton, Ont.

1859 PIPES, Flanged.

*Canadian Iron & Foundry Co., Limited, Montreal, Que. (Adv. page 827.)
Gartshore-Thomson Pipe & Foundry Co., Limited, Hamilton, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

1860 PIPE, Iron, corrugated and galvanized.

*Garth Co., The, Montreal, Que.
Kemp Mfg. Co., Toronto, Ont.
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)
Stevely, Wm., & Son, London, Ont.

1861 PIPE, Lead.

Canada Metal Co., Limited, The, Toronto, Ont. (Adv. page 869.)
*Consolidated Mining & Smelting Co. of Canada, Limited, Trail, B.C. (Adv. page 1026.)
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
Robertson, The James, Co., Limited, Montreal, Que.
Robertson, Thomas, & Co., Limited, Montreal, Que.
Somerville, Limited, Toronto, Ont. (Adv. Outside Back Cover.)

1862 PIPE, Riveted.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Vancouver Engineering Works, Limited, Vancouver, B.C.

1863 PIPE, Salt glazed and vitrified.

Dominion Sewer Pipe Co., Limited, The, Swansea, Ont. (Adv. page 1035.)
Hamilton & Toronto Sewer Pipe Co., Limited, The, Hamilton, Ont.
Maloney, John, & Co., Toronto, Ont.
Ontario Sewer Pipe Co., Limited, Mimico, Ont.
*Standard Drain Pipe Co. of St. Johns, Que., Limited, The, St. Johns, Que. (Adv. page 854.)

1864 PIPES, Smoking.

Rattray, J., & Co., Limited, Montreal, Que.

1865 PIPE, Soil.

*Amherst Foundry Co., Limited, Amherst, N.S. (Adv. page 849.)
*Mount Royal Foundry Co., Limited, The, Montreal, Que.
Northern Iron Works, Limited, Winnipeg, Man.
*Standard Ideal Co., Limited, The, Port Hope, Ont. (Adv. pages 873 and 874.)
Star Iron Co., Limited, Montreal, Que.
Toronto Foundry Co., Limited, Toronto, Ont.
Toronto Hardware Mfg. Co., Toronto, Ont.
*Warden King, Limited, Montreal, Que.

1866 PIPE, Stove.

Aubry, A., & Fils, Montreal, Que.
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
*Gurney Foundry Co., Limited, The, Toronto, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)
*Wright, E. T., & Co., Hamilton, Ont.

1867 PIPE, Wood Stave.

*Pacific Coast Pipe Co., Limited, Vancouver, B.C.

1868 PIPE, Wrought, Black and Galvanized.

*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Page-Hersey Iron, Tube & Lead Co., Limited, Toronto, Ont.

1869 PIPE WORK, Blow, Ventilating and Heating.

*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)
Wheeler & Bain, Toronto, Ont.

1870 PIPINGS, Cord.

Walker, E. C., & Sons, Toronto, Ont.

1871 PIPING, Steam.

*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)

1872 PITCH.

*Carritte, de B., St. John, N.B.
Crescent Oil Co., The, Hamilton, Ont.
*Dominion Paper Co., Montreal, Que.
*Dominion Tar & Chemical Co., Limited, The, Sydney, N.S.
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
Lockerby & McComb, Montreal, Que. (Adv. page 1047.)
*McArthur, Alex., & Co., Limited, Montreal, Que. (Adv. page 1040.)
Paterson Mfg. Co., Limited, Toronto, Ont.

1873 PLANERS, Iron Working.

*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)
*London Machine Tool Co., Limited, The, Hamilton, Ont. (Adv. page 1016.)
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
*McGregor, Gourlay Co., Limited, The, Galt, Ont.
Plessisville, La Fonderie de, Plessisville, Que.

1874 PLANERS, Road.

*Wilkinson Plow Co., Toronto, Ont.

1875 PLANERS, Woodworking.

*Ballantine, John, & Co., Limited, Preston, Ont.
*Clark-Demill Co., Limited, Hespeler, Ont. (Adv. page 838.)
*Berlin Machine Works, Limited, Hamilton, Ont.
Cowan & Co., of Galt, Limited, Galt, Ont.
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
*Jackson, Cochrane & Co., Berlin, Ont.
*MacGregor, Gourlay Co., Limited, Galt, Ont.

1876 PLANTERS, Corn.

*Cossitt Co., Limited, The, Brockville, Ont.
Otterville Mfg. Co., Limited, Otterville, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.
Vilas, W. F., Cowansville, Que.

1877 PLASTER, Asbestic Wall.

*Canadian Asbestos Co., Montreal, Que.

1878 PLASTER, Casting and Dental.

*Albert Mfg. Co., Hillsborough, N.B.

1879 PLASTER (land), Plaster of Paris and Hard Wall Plaster.

Alabastine Co., Limited, The, Paris, Ont.
*Albert Mfg. Co., Hillsborough, N.B.
Imperial Plaster Co., Limited, The, Toronto, Ont.
Manitoba Gypsum Co., Limited, Winnipeg, Man.

1880 PLASTER, Tile (Hollow).

Manitoba Gypsum Co., Limited, Winnipeg, Man.

1881 PLASTER, Wood Fibre.

Manitoba Gypsum Co., Liimted, Winnipeg, Man.

1882 PLATERS, Brass, Copper, and Nickel.

Bowmanville Foundry Co., Limited, The, Bowmanville, Ont.
*Chadwick Bros., Hamilton, Ont.
*Cuthbert, W. R., & Co., Montreal, Que.
Dunn, J. A., & Co., Halifax, N.S.
*Garth Co., The, Montreal, Que.
National Hardware Co., Limited, Orillia, Ont.
Somerville, Limited, Toronto, Ont. (Adv. Outside Back Cover.)
*Whaley, Royce & Co., Limited, Toronto, Ont.

1883 PLATES, Amalgamating, Mining.

Booth Copper Co., Limited, The, Toronto, Ont.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.

1884 PLATES, Bridge.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Bridge Co., Limited, The, Walkerville, Ont. (Adv. page 1044.)
Dickson Bros. Co., Limited, Campbellford, Ont.
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Nova Scotia Steel & Coal Co., Limited, New Glasgow, N.S. (Adv. page 870.)

1885 PLATES, Dry, Photographic.

*Cameras, Limited, Montreal, Que.
Canadian Kodak Co., Limited, Toronto, Ont. (Adv. page 1030.)

Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)

1886 PLATES, Felloe.

*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)

1887 PLATES, Fish and Railway Tie.

Hamilton Steel & Iron Co., Limited, The, Hamilton, Ont. (Adv. page 1029.)
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041.)
Nova Scotia Steel & Coal Co., Limited, New Glasgow, N.S. (Adv. page 870.)

1888 PLATES, Key, Letter-box, Name, Newspaper, Pull, Push, and Sash.

Belleville Hardware Co., Limited, The, Belleville, Ont.
Carriage Mountings Co., Limited, Niagara Falls, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Hamilton Stamp & Stencil Works, Limited, Hamilton, Ont.
*Jenking Brass Mfg. Co., Limited, Montreal, Que.
*McAvity, T., & Sons, St. John, N.B.
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)
Mitchell, The Robert, Co., Limited, Montreal, Que.
*Montreal Stencil Works, Montreal, Que. (Adv. page 1032.)
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
*Patterson & Heward, Toronto, Ont.
Taylor-Forbes Co., Limited, Guelph, Ont.
Toronto Stamp & Stencil Works, Toronto, Ont.
Walker & Campbell, Montreal, Que.

1889 PLATES, Screen.

Union Screen Plate Co. of Canada, Limited, Lennoxville, Que.

1890 PLATE, Steel.

Peck Rolling Mills, Limited, The, Montreal, Que.

1891 PLATES, Stereo (for newspapers).

Central Press Agency, Limited, The, Toronto, Ont.

1892 PLATE, Tire.

Jardine, A. B., & Co., Hespeler, Ont.

1893 PLAYERPIANOS.

*Bell Piano & Organ Co., Limited, Guelph, Ont.
*Gourlay, Winter & Leeming, Toronto, Ont. (Adv. page 1062.)
Heintzman, Gerhard, Limited, Toronto, Ont.
*Karn Piano & Organ Co., Limited, Woodstock, Ont.
*Martin-Orme Piano Co., Limited, The, Ottawa, Ont.
Stanley, Frank, Toronto, Ont.
*Williams Piano Co., Limited, The, Oshawa, Ont. (Adv. page 1021.)

1894 PLIERS, Gas.

*Canadian Billings & Spencer, Limited, Welland, Ont. (Adv. page 1031.)

1895 PLOWS, Agricultural.

*Belanger, A., Montmagny, Que.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Cockshutt Plow Co., Limited, Brantford, Ont.
Fleury's Sons, J., Aurora, Ont.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Paris Plow Co., Limited, The, Paris, Ont.
Shantz, P. E., Preston, Ont.
*Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)
Vilas, W. F., Cowansville, Que.
*Wilkinson Plow Co., Toronto, Ont.

1896 PLOWS, Disc.

Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)
*Wilkinson Plow Co., Toronto, Ont.

1897 PLOWS, Ditching, Rooter, Contractors', Etc.

*Bell, B., & Son Co., Limited, St. George, Ont.
*Toronto Pressed Steel Co., Limited, The, Toronto, Ont.
*Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)
Western Iron Works, Limited, Winnipeg, Man.
*Wilkinson Plow Co., Toronto, Ont.

1898 PLOWS, Drilling and Potato Digging.

*Bell, B., & Son Co., Limited, St. George, Ont.
*Cockshutt Plow Co., Limited, Brantford, Ont.
*Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)
*Wilkinson Plow Co., Toronto, Ont.

1899 PLOWS, Gang and Hillside.

*Belanger, A., Montmagny, Que.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Cockshutt Plow Co., Limited, Brantford, Ont.
Fleury's Sons, J., Aurora, Ont.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*Paris Plow Co., Limited, The, Paris, Ont.
Shantz, P. E., Preston, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.
*Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)
Vilas, W. F., Cowansville, Que.
*Wilkinson Plow Co., Toronto, Ont.

1900 PLOWS, Road.

*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)

1901 PLOWS, Snow.

Crossen Car Mfg. Co., of Cobourg, Limited, The, Cobourg, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*Montreal Locomotive Works, Limited, Montreal, Que.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Vilas, W. F., Cowansville, Que.

1902 PLOWS, Sulky.

*Belanger, A., Montmagny, Que.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Cockshutt Plow Co., Limited, Brantford, Ont.
Fleury's Sons, J., Aurora, Ont.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Paris Plow Co., Limited, The, Paris, Ont.
*Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)
Vilas, W. F., Cowansville, Que.
*Wilkinson Plow Co., Toronto, Ont.

1903 PLUGS, Paper Roll.

Canada Spool & Bobbin Co., Limited, Walkerton, Ont.

1904 PLUMBAGO.

Hamilton Facing Mill Co., Limited, Hamilton, Ont.

1905 PLUMBERS' SUPPLIES.

Bennett & Wright Co., Limited, The, Toronto, Ont.
*Canadian Brass Mfg. Co., Limited, The, Galt, Ont.
*Canadian Wolverine Co., Limited, Chatham, Ont.
*Cuthbert, W. R., & Co., Montreal, Que.
*Dominion Radiator Co., Limited, The, Toronto, Ont.
Empire Mfg. Co., Limited, London, Ont.
Farquhar Bros., Halifax, N.S.
*Garth Co., The, Montreal, Que.
General Brass Works, Limited, The, Toronto, Ont.
Hughes, J. W., & Son, Montreal, Que.
Labatt Mfg. Co., Limited, The, London, Ont.
*Longard Bros., Halifax, N.S.
*McAvity, T., & Sons, St. John, N.B.
*Mechanics' Supply Co., Quebec, Que.
Mitchell, The Robert Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Purdy, Mansell, Limited, Toronto, Ont. (Adv. page 1038).
Robertson, The James, Co., Limited, Montreal, Que.
Shaw & Mason, Limited, Sydney, N.S.
Standard Brass Mfg. Co., Limited, Sarnia, Ont.
*Standard Contracting Co., Limited, Toronto, Ont.
*Standard Ideal Co., Limited, The, Port Hope, Ont. (Adv. pages 873 and 874.)
Somerville, Limited, Toronto, Ont. (Adv. Outside Back Cover.)
Taylor-Forbes Co., Limited, Guelph, Ont.
Toronto Hardware Mfg. Co., Toronto, Ont.

1906 PLUMBERS' SUPPLIES, Rubber.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)
Durham Rubber Co., Limited, The, Bowmanville, Ont. (Adv. page 844.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

1907 POCKET BOOKS, Wallets, Etc.

Brown Bros., Limited, The, Toronto, Ont. (Adv. page 867.)
Canada Leather Goods Co., Montreal, Que.
*Eveleigh, J., & Co., Limited, Montreal, Que.
*General Leather Goods, Limited, Toronto, Ont.
Sale, The Julian, Leather Goods Co., Limited, Toronto, Ont.
Western Leather Goods Co., Limited, The, Toronto, Ont.

1908 POCKETS, Cigar, Wax-lined.

*Paper Goods Co., Limited, The, Toronto, Ont.

1909 POINTS, Drive Well.

*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
Otterville Mfg. Co., Limited, Otterville, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

1910 POKES, Horse.

*Cameron, Dunn Mfg. Co., Limited, Strathroy, Ont. (Adv. page 852.)
*Still, J. H., Mfg. Co., Limited, St. Thomas, Ont.

1911 POLES, Carriage.

Ackland, D., & Son, Limited, Winnipeg, Man.
*Canada Wheel Works, Limited, The, Merriton, Ont.
*Chatham Bent Goods Co. Limited, The, Chatham, Ont.
Heard, John, & Co., St. Thomas, Ont.
Hore, F. W., & Son, Limited, Hamilton, Ont.
Loughead Bros., Limited, Sarnia, Ont.
*Victoria Wheel Works, Galt, Ont. (Adv. page 843.)
*Windsor Turned Goods Co., Limited, The, Windsor, Ont.

1912 POLES, Cornice.

*Phillips Mfg. Co., Limited, Toronto, Ont. (Adv. page 1000.)

1913 POLES, Curtain.

*Canada Wood Specialty Co., Limited, The, Orillia, Ont.
Daly & Morin, Montreal, Que.
Hees, Geo. H., Son & Co., Limited, Toronto, Ont.
Otterville Mfg. Co., Limited, Otterville, Ont.

1914 POLES, Electric Light, Telegraph, and Telephone.

Booth, J. R., Ottawa, Ont.
Columbia River Lumber Co., Limited, Golden, B.C.
East Kootenay Lumber Co., Limited, Cranbrook, B.C.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
*Keenan Bros., Limited, Owen Sound, Ont.
Mineral Range Iron Mining Co., Limited, The, Bessemer, Ont.
Pearce Co., Limited, The, Marmora, Ont.
Rat Portage Lumber Co., Limited, The, Kenora, Ont.
Rathbun Co., The, Deseronto, Ont.
*Shives Lumber Co., Limited, Campbellton, N.B.
Yale Columbia Lumber Co., Limited, Nakusp, B.C.

1915 POLES, Pike.

*Cameron, Dunn Mfg. Co., Limited, The, Stratford, Ont. (Adv. page 852.)
*Crawford, W. C., Tilbury, Ont.
*McFarlane-Neill Mfg. Co., Limited, The, St. Mary's, N.B.
*Pink, Thomas, Pembroke, Ont.
*Still, J. H., Mfg. Co., Limited, St. Thomas, Ont.

1916 POLES, Steel.

See Steelwork, architectural and structural.

1917 POLES, Trolley.

Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)

1918 POLISH, Metal.

Crescent Oil Co., The, Hamilton, Ont.
*Crown Oil Refining Co., Limited, Hamilton, Ont.
Domestic Specialty Co., Limited, Hamilton, Ont.
*Moore, Benjamin, & Co., Limited, West Toronto, Ont.
Nonsuch Mfg. Co., Limited, The, Toronto, Ont.
*Ralston, Robt., & Co., Hamilton, Ont.
*Sterne, G. F., & Sons, Brantford, Ont.
*Sultana Mfg. Co., Montreal, Que.

1919 POLISH, Shoe and Leather.

American Dressing Co., Montreal, Que.
*Dalley, The F. F., Co., of Hamilton, Limited, Hamilton, Ont.
Domestic Specialty Co., Limited, Hamilton, Ont.
Nonsuch Mfg. Co., Limited, The, Toronto, Ont.
*Ralston, Robt., & Co., Hamilton, Ont.
*Sultana Mfg. Co., Montreal, Que.

1920 POLISH, Stove.

*Dalley, The F. F., Co., of Hamilton, Limited, Hamilton, Ont.
Domestic Specialty Co., Limited, Hamilton, Ont.
Nonsuch Mfg. Co., Limited, The, Toronto, Ont.
*Ralston, Robt., & Co., Hamilton, Ont.
*Sterne, G. F., & Sons, Brantford, Ont.
*Sultana Mfg. Co., Montreal, Que.
*Tellier, Rothwell & Co., Montreal, Que.

1921 PORK AND PORK PRODUCTS.

Burns, P., & Co., Calgary, Alta.
*Canadian Packing Co., Limited, The, London, Ont.
Clark, William, Montreal, Que.
*Collingwood Packing Co., Limited, Collingwood, Ont.
*Davies, The Wm., Co., Limited, Toronto, Ont.
*Davis & Fraser, Halifax, N.S.
*Dominion Meat Co., Limited, The, Calgary, Alta.
*Fearman, F. W., Co., Limited, Hamilton, Ont.

*Fowler's Canadian Co., Limited, Hamilton, Ont.
Gallagher-Hull Meat & Packing Co., Limited, The, Edmonton, Alta.
*Gordon, Ironside & Fares Co., Limited, Winnipeg, Man.
*Gunns, Limited, Toronto, Ont.
*Ingersoll Packing Co., Limited, The, Ingersoll, Ont.
Kennedy, H. P., Peterboro, Ont.
Laing Packing & Provision Co., Limited, The, Montreal, Que.
*Matthews, The Geo., Co., Limited, Peterboro, Ont.
Montreal Packing Co., Limited, The, Montreal, Que.
*O'Mara, Joseph, Palmerston, Ont.
*Park, Blackwell Co., Limited, Toronto, Ont.
Van Bever Packing & Provision Co., Limited, The, West Toronto, Ont.
Western Packing Co., of Canada, Limited, The, Winnipeg, Man.

1922 PORK AND BEANS, Canned.

Clark, William, Montreal, Que.

1923 PORTER.

Boswell & Bro., Limited, Quebec, Que.
British American Brewing Co., Limited, Windsor, Ont.
Calgary Brewing & Malting Co., Limited, Calgary, Alta.
Canadian Breweries, Limited, Montreal, Que.
Carling Brewing & Malting Co., London, Ont.
Cosgrave Brewery Co., of Toronto., Limited, The, Toronto, Ont.
Dawes & Co., Montreal, Que.
Dominion Brewery Co., Limited, The, Toronto, Ont.
*Dow, Wm., & Co., Montreal, Que.
Drewry, Edward L., Winnipeg, Man.
Edmonton Brewing & Malting Co., Limited, The, Edmonton, Alta.
Hamilton Brewing Association, Limited, The, Hamilton, Ont.
Holliday Bros., Guelph, Ont.
Keith, A., & Son, Halifax, N.S.
*Labatt, John, London, Ont.
McDonagh & Shea, Winnipeg, Man.
Molson, John H. R., & Bros., Montreal, Que.
*O'Keefe Brewery Co., of Toronto, Limited, The, Toronto, Ont.
Proteau & Carignan, Quebec, Que.
Sleeman & Sons, Guelph, Ont.
Soo Falls Brewing Co., Sault Ste. Marie, Ont
Toronto Brewing & Malting Co., Limited, Toronto, Ont.
*Victoria Phoenix Brewing Co., Limited, The, Victoria, B.C.
Walkerville Brewing Co., Limited, The, Walkerville, Ont.

1924 PORTLAND CEMENT.

See Cement, Portland.

1925 POST CARDS, Picture.

Buntin, Gillies & Co., Limited, Hamilton, Ont.
*Cameras, Limited, Montreal, Que.
Ford, Douglas, Printing Co., Toronto, Ont.
Grip, Limited, Toronto, Ont. (Adv. page 1025.)
Modern Job Printing Co., Limited, The, Toronto, Ont.
Ontario Engraving Co., Hamilton, Ont.
Pugh Mfg. Co., The, Toronto, Ont.
*Warwick Bros. & Rutter, Limited, Toronto, Ont.
*Young Bros., Toronto, Ont.

1926 POSTERS.

*Beneallack Lithographing & Printing Co., The, Montreal, Que.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
*Duncan Lithographing Co., Limited, The, Hamilton, Ont.
*Howell Lithographing Co., Hamilton, Ont.
Johnston, W. S., & Co., Toronto, Ont
London Printing & Lithographing Co., The, London, Ont.
National Printing Co., Limited, Montreal, Que.
*Rolph & Clark, Limited, Toronto, Ont. (Adv. page 998.)
*Toronto Lithographing Co., Limited, The, Toronto, Ont.
Ware Co., of Canada, Limited, The, Montreal, Que.

1927 POSTS, Bumping.

*Holden, N. J., Co., Limited, Montreal, Que.

1928 POSTS, Cedar.

Columbia River Lumber Co., Limited, Golden, B.C.
Cushing Bros. Co., Limited, Calgary, Alta.
Dempster, James, & Co., Halifax, N.S.
East Kootenay Lumber Co., Limited, Cranbrook, B.C.
*Grier, G. A., & Son, Montreal, Que.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
*Keenan Bros., Limited, Owen Sound, Ont.
*Murray & Gregory, Limited, St. John, N.B.
Pearce Co., Limited, The, Marmora, Ont.
Rat Portage Lumber Co., Limited, The, Kenora, Ont.
Rathbun Co., The, Deseronto, Ont.
Yale Columbia Lumber Co., Limited, Nakusp, B.C.

1929 POSTS, Iron.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Ives, The, H. R., Co., Limited, Montreal, Que.
Taylor-Forbes Co., Limited, Guelph, Ont.

1930 POTS, Flower, and Hanging Baskets.

Campbell's Sons, R., Hamilton, Ont.
Cranston, John & Son, Hamilton, Ont.
*Standard Contracting Co., Limited, Toronto, Ont.

1931 POTS, Solder.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

1932 POTS, Watering.

Aubry, A., & Fils, Montreal, Que.
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)

1933 POTTERY.

See Stoneware.

1934 POUCHES, Tobacco (rubber).

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)

1935 POULTRY, Canned.

*Burlington Canning Co., Limited, The, Burlington, Ont.
*Canadian Canners, Limited, Hamilton, Ont.

1936 POWDERS, Ammonia.

See Ammonia Powder.

1937 POWDER, Baking.

Bedard, J. B., & Freres, Quebec, Que.
Blackwood's, Limited, The, Winnipeg, Man.
Blue Ribbon, Limited, Winnipeg, Man.
*Capstan Mfg. Co., Toronto, Ont.
Codville Co., Limited, The, Winnipeg, Man.
*Dalley, The F. F., Co., of Hamilton, Limited, Hamilton, Ont.
Dyson Co., The, Winnipeg, Man.
Ewing, S. H., & Sons, Montreal, Que.
*Gillett, E. W., Co., Limited, Toronto, Ont.
*Gorman, Eckert & Co., Limited, London, Ont.
*Greig, The Robert, Co., Limited, Toronto, Ont.
Imperial Extract Co., Toronto, Ont.
McLarens, Limited, Hamilton, Ont.
*National Drug & Chemical Co. of Canada, Limited, Montreal, Que.
*Pure Gold Mfg. Co., Limited, Toronto, Ont.
White Star Mfg. Co., The, Winnipeg, Man.

1938 POWDER, Blasting and Sporting.

*Acadia Powder Co., Limited, Halifax, N.S.
Giant Powder Co., Con., The, Victoria, B.C.
*Hamilton Powder Co., Montreal, Que.
Ontario Powder Co., Limited, Kingston, Ont.
Standard Explosives, Limited, Montreal, Que.

1939 POWDER, Bronze.

*Ault & Wiborg Co. of Canada, Limited, The, Toronto, Ont.
*Brandram - Henderson, Limited, Montreal, Que. (Adv. page 840.)
*Canadian Bronze Powder Works, The, Montreal, Que.
*Ramsay, A., & Son Co., Montreal, Que.

1940 POWDER, Coal Saving and Smoke Consuming.

Auld Mucilage Co., Montreal, Que.

1941 POWDERS, Condition.

*Sultana Mfg. Co., Montreal, Que.

1942 POWDER, Jelly.

Blue Ribbon, Limited, Winnipeg, Man.
Codville Co., Limited, The, Winnipeg, Man.
*Dalley, The F. F., Co., of Hamilton, Limited, Hamilton, Ont.
Dalton Bros., Toronto, Ont.
Dyson Co., The, Winnipeg, Man.
*Gorman, Eckert & Co., Limited, London, Ont.
*Greig, The Robert, Co., Limited, Toronto, Ont.
Imperial Extract Co., Toronto, Ont.
McLarens, Limited, Hamilton, Ont.
*MacLaren Imperial Cheese Co., Limited, Toronto, Ont.
Nicholson & Brock, Toronto, Ont.
*Pure Gold Mfg. Co., Limited, Toronto, Ont.
White Star Mfg. Co., The, Winnipeg, Man.

1943 POWDER, Milk.

Canadian Milk Products, Toronto, Ont.

1944 POWDER, Phenyle Disinfectant.

*Spooner, Alonzo W., Port Hope, Ont.

1945 POWDER, Soap.

Barsalou, J., & Cie., Limitee, Montreal, Que.

1946 POWDER, Talcum.

Richards Pure Soap Co., Limited, The, Woodstock, Ont.

1947 POWDER (toilet) Tooth.

*Seely Mfg. Co., Windsor, Ont.

1948 POWDER, Type Cleansing.

Auld Mucilage Co., Montreal, Que.

1949 POWDER, Washing.

Auld Mucilage Co., Montreal, Que.
*Cottam Bird Seed, London, Ont.
*Fairbank, The N. K., Co., Montreal, Que.
*Gorman, Eckert & Co., Limited, London, Ont.
*Lawrason, S. F., & Co., London, Ont.
*Pendray, W. J., Victoria, B.C.
Richards Pure Soap Co., Limited, The, Woodstock, Ont.
*Royal Crown, Limited, The, Winnipeg, Man.
Standard Soap Co., Limited, Calgary, Alta.

1950 POWDER, Worm.

*Zenner Disinfectant Co., Windsor, Ont.

1951 POWER, Electric

Georgian Bay Milling & Power Co., Limited, The, Meaford, Ont.
Shawinigan Water & Power Co., Montreal, Que.

1952 PRESERVATIVES, Food.

*Chemical Laboratories, Limited, Toronto, Ont.

1952a PRESERVATIVES, Wood

*Gold Teredo-Proof Pile Co., Limited, Vancouver, B.C.

1953 PRESERVER, Egg.

*Moore, Benjamin, & Co., Limited, West Toronto, Ont.

1954 PRESERVERS, Life.

Ewing, S. H., & Sons, Montreal, Que.
Freyseng Cork Co., Limited, Toronto, Ont.
Leckie, John, Limited, Toronto, Ont.
*Turner, J. J., & Sons, Peterboro, Ont.

1955 PRESERVES.

See Fruit, canned.

1956 PRESSES, Arbor and Boiler Head.

*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863.)

1957 PRESSES, Baling.

*Bredannaz, Louis, & Sons, Toronto, Ont.
*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863.)

1958 PRESSES, Celluloid, Leather, Rubber, and Vulcanizing.

*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863.)

1959 PRESSES, Cheese.

Plessisville, La Fonderie de, Plessisville, Que.
*Richardson, C., & Co., St. Mary's, Ont. (Adv. page 1063.)

1960 PRESSES, Cider and Wine.

London Foundry Co., Limited, The, London, Ont.
*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863.)

1961 PRESSES, Copying.

Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

1962 PRESSES, Die, Hand and Filter.

*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863.)

1963 PRESSES, Drill.

*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)
Canadian Buffalo Forge Co., Limited, Montreal, Que.
Gardner, Robert, & Son, Montreal, Que. (Adv. page 1043.)
Hamilton Tool Co., Limited, Hamilton, Ont.
Jardine, A. B., & Co., Hespeler, Ont.
MacGregor, Gourlay Co., Limited, The, Galt, Ont.

1964 PRESSES, Foot and Power, Drop, Screw, Punching.

*Banfield, W. H., & Sons, Toronto, Ont. (Adv. page 1048.)
*Brown, Boggs Co., Limited, The, Hamilton, Ont.
MacGregor, Gourlay Co., Limited, The, Galt, Ont.
*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863.)

1965 PRESSES, Hay.

*Bessette, La Cie J. & S., Ltee, Ibervilie, Que.
*Chalifoux, O., & Fils, St. Hyacinthe, Que.
*Faucher & Fils, Montreal, Que.
Shantz, P. E., Preston, Ont.
Woodstock Wind-Motor Co., Limited, Woodstock, Ont.

1966 PRESSES, Hydraulic.

*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863.)

1967 PRESSES, Hydraulic Screw, Gauge Testing.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

1968 PRESSES, Printing and Lithographing.

*Miller & Richard, Toronto, Ont.
*Toronto Type Foundry Co., Limited, Winnipeg, Man.

1969 PRESSES, Shingle.

*Letson & Burpee, Limited, Vancouver, B.C.

1970 PRESSES, Steam.

*Creelman Bros., Georgetown, Ont.
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044.)
Shantz, P. E., Preston, Ont.

1971 PRESSES, Veneer.

*Ballantine, John, & Co., Limited, Preston, Ont.
*Jackson, Cochrane & Co., Berlin, Ont.
*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863.)

1972 PRIMERS.

*Acadia Powder Co., Limited, The, Halifax, N.S.
*Dominion Cartridge Co., Limited, Montreal, Que.

1973 PRINTERS, Card Plate.

*Smith, The David, Engraving & Lithographing Co., Toronto, Ont.

1974 PRINTERS, Job.

Apted, W. H., Toronto, Ont.
Armac Press, The, Toronto, Ont.
*Benallack Lithographing & Printing Co., The, Montreal, Que.
Brown-Searle Printing Co., The, Toronto, Ont.
Bryant Press, Limited, Toronto, Ont.
Bulman Bros., Limited, Winnipeg, Man.
Colonist Printing & Publishing Co., Limited, The, Victoria, B.C.
Commercial Press, The, Toronto, Ont.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
*Copeland-Chatterson-Crain, Limited, Toronto, Ont.
Copp, Clark Co., Limited, The, Toronto, Ont.
Corneil, C. R., Montreal, Que.
Davis & Henderson, Toronto, Ont.
Dawson, Chas. F., Limited, Montreal, Que.
*Desbarats & Co., Montreal, Que.
Duncan, Robert, & Co., Hamilton, Ont.
*Evans & Hastings, Vancouver, B.C.
Farmer's Advocate of Winnipeg, Limited, The, Winnipeg, Man.
Fleming, The Atwell, Printing Co., Toronto, Ont.
Ford, Douglas, Printing Co., Toronto, Ont.
Fortier, Joseph, Montreal, Que.
Grand & Toy, Limited, Toronto, Ont.
Griffin & Richmond Co., Limited, The, Hamilton, Ont.
Guertin Printing Co., The, Montreal, Que.
Hart & Riddell, Toronto, Ont.
Hunter, Rose Co., Limited, The, Toronto, Ont.
Imperial Publishing Co., Limited, The, Halifax, N.S.
*Imrie Printing Co., Limited, Toronto, Ont.
International Railway Publishing Co., Limited, The, Montreal, Que.
Johnston, W. S., & Co., Toronto, Ont.
Keith, Chas. W., Toronto, Ont.
*Knowles & Co., London, Ont.
*Lawson & Jones, Limited, London, Ont.
London Printing & Lithographing Co., The, London, Ont.
Long, A. E., & Co., Limited, Toronto, Ont.
Lovell, John, & Son, Limited, Montreal, Que.
Lovell, The R. J., Co., Limited, Toronto, Ont.
*McAlpine Publishing Co., Limited, Halifax, N.S.
McLean, R. G., Toronto, Ont. (Adv. page 1035.)
Mace, Geo. A., & Co., Montreal, Que.
Mail Job Printing Co., Limited, The, Toronto, Ont.
Methodist Book & Publishing House, Toronto, Ont. (Adv. page 1010.)
*Might Directories, Limited, Toronto, Ont.
Miln-Bingham Printing Co., Toronto, Ont.
*Modern Printing Co., The, Montreal, Que.
Monetary Times Printing Co., Toronto, Ont.
Mortimer Co., Limited, The, Ottawa, Ont.
Morton, Phillips & Co., Montreal, Que.
*Murray Printing Co., Limited, Toronto, Ont.
National Printing Co., Limited, Montreal, Que.
Osborne, J. Frank, Toronto, Ont.
*Paquin, C., & Fils, Montreal, Que.
Patrie Publishing Co., Limited, La, Montreal, Que.
*Reason, H. T., & Co., London, Ont.
*Rolph & Clark, Limited, Toronto, Ont. (Adv. page 998.)
*Southam, Limited, Montreal, Que.
Southam Printing & Litho. Co., Limited, The, London, Ont.
Spectator Printing Co., Limited, The, Hamilton, Ont.
Stevenson Printing Co., The, Toronto, Ont.
Stovel Co., The, Winnipeg, Man.
Talbot, A., & Co., London, Ont.
Trades Publishing Co., The, Montreal, Que.
*Warwick Bros. & Rutter, Limited, Toronto, Ont.

1975 PRINTERS, Litho.

See Lithographers.

1976 PRINTERS, Map.

See Maps.

1977 PRINTERS, Music.

*Whaley, Royce & Co., Limited, Toronto, Ont.

1978 PRINTERS, Steel and Copper Plate.

*Alexander & Cable Lithographing Co., Toronto, Ont.
*American Bank Note Co., Ottawa, Ont.
*Benallack Lithographing & Printing Co., The, Montreal, Que.
*Colonist Printing & Publishing Co., Limited, The, Victoria, B.C.
*Duncan Lithographing Co., Limited, The, Hamilton, Ont.
*Smith, The David, Engraving & Lithographing Co., Toronto, Ont.

1979 PRINTERS, Wood.

Barchard & Co., Limited, Toronto, Ont.
*Consumers Box & Lumber Co., Limited, Toronto, Ont.
Esplin, G. & J., Montreal, Que.
*Firstbrook Box Co., Limited, The, Toronto, Ont.
Hill Mfg. Co., The, Quebec, Que.
Kilgour Mfg. Co., Hamilton, Ont.

1980 PRINTING PRESSES.

See Presses, Printing and Lithographing.

1981 PRISMS, Window and Sidewalk.

Luxfer Prism Co., Limited, Toronto, Ont.
Watson, John, & Son, Montreal, Que.

1982 PRODUCERS, Gas.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Fairbanks Morse Canadian Mfg. Co., Limited, Toronto, Ont. (Adv. page 1064.)
Waterloo Mfg. Co., Limited, Waterloo, Ont.

1983 PRUNERS, Tree.

Taylor-Forbes Co., Limited, Guelph, Ont.

1984 PUBLISHERS, Book.

*Blake, W. E., Toronto, Ont.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
Copp, Clark Co., Limited, The, Toronto, Ont.
*Desbarats & Co., Montreal, Que.
Gage, W. J., & Co., Limited, Toronto, Ont.
Granger Freres, Montreal, Que.
Hunter, Rose Co., Limited, The, Toronto, Ont.
Librairie Beauchemin, Limited, Montreal, Que.
Lovell, John, & Son, Limited, Montreal, Que.
McAlpine, Chas. D., Toronto, Ont.
*McAlpine Publishing Co., Limited, Halifax, N.S.
Methodist Book & Publishing House, Toronto, Ont. (Adv. page 1010.)
*Morang & Co., Limited, Toronto, Ont.
Morton, Phillips & Co., Montreal, Que.
*Warwick Bros. & Rutter, Limited, Toronto, Ont.

1985 PUBLISHERS, Newspaper.

See Newspaper.

1986 PUBLISHERS, Trade Paper.

See Trade Publications.

1987 PULLERS, Beet.

*Wilkinson Plow Co., Toronto, Ont.

1988 PULLEYS, Ball Bearing.

*Chapman Double Ball Bearing Co., Limited, Toronto, Ont.

1989 PULLEYS, Hay Fork.

See Carriers, Hay, Feed and Grain.

1990 PULLEYS Iron.

Augustin & Daudelin, St. Hyacinthe, Que.
*Bell, B., & Son Co., Limited, St. George, Ont.
Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.
*Brown Machine Co., The, New Glasgow, N.S.
*Clark-Demill Co., Limited, Hespeler, Ont. (Adv. page 838.)
*Dodge Mfg. Co. of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
Fleck, Alexander, Limited, Ottawa, Ont.
Gardner, Robert, & Son, Montreal, Que. (Adv. page 1043.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Letson & Burpee, Limited, Vancouver, B.C.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Owen Sound Iron Works Co., Limited, The, Owen Sound, Ont.
Oxford Foundry & Machine Co., Oxford, N.S.
Plessisville, La Fonderie de, Plessisville, Que.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
*Stratford Mill Building Co., Limited, The, Stratford, Ont.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
*Wilson, J. C., & Co., Glenora, Ont.

1991 PULLEYS, Sash.

*Bell, B., & Son Co., Limited, St. George, Ont.
Belleville Hardware Co., Limited, The, Belleville, Ont.
Peterboro Lock Mfg. Co., Limited, The, Peterboro, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

1992 PULLEYS, Wood and Wood Split.

*Bell, B., & Son Co., Limited, St. George, Ont.
Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.
*Dodge Mfg. Co. of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
*Letson & Burpee, Limited, Vancouver, B.C.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Plessisville, La Fonderie de, Plessisville, Que.
Reeves Pulley Mfg. Co., Limited, The, Toronto, Ont.
*Wilson, J. C., & Co., Glenora, Ont.

1993 PULLS, Door and Drawer.

Belleville Hardware Co., Limited, The, Belleville, Ont.
*Hahn Brass Co., Limited, The, New Hamburg, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Taylor-Forbes, Co., Limited, Guelph, Ont.

1994 PULLS, Gong Bell.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

1995 PULP, Fruit and Vegetable.

*Biggs Fruit & Produce Co., Limited, Burlington, Ont.
*Burlington Canning Co., Limited, The, Burlington, Ont.
*Canadian Canners, Limited, Hamilton, Ont.
*Robinson, O. E., & Co., Ingersoll, Ont.

1996 PULP, Wood (Mechanical).

*Belgo Canadian Pulp & Paper Co., Limited, Shawinigan Falls, Que.
Booth, J. R., Ottawa, Ont.
*Chicoutimi, La Cie de Pulpe de, Chicoutimi, Que.
*Dominion Paper Co., Montreal, Que.
Ford, Jos., & Co., Portneuf Station, Que.
Jonquiere Pulp Co., The, Jonquiere, Que.
*LaHave Pulp Co., Limited, Bridgewater, N.S.
Lake Megantic Pulp Co., Lake Megantic, Que.
*Laurentide Paper Co., Limited, The, Grand Mere, Que.
*Maclaren, The James, Co., Limited, Buckingham, Que.
*North Shore Power, Railway & Navigation Co., Quebec, Que.
Riordon Paper Mills, Limited, The, Montreal, Que. (Adv. page 1046.)
*River du Loup Pulp Co., Limited, The, Fraserville, Que.
*St. Raymond Paper Co., Limited, Montreal, Que.
Sault Ste. Marie Pulp & Paper Co., The, Sault Ste. Marie, Ont.
*Soucy, F. Florentin, Old Lake Road, Que.

1997 PULP, Wood (Sulphite).

*Dominion Paper Co., Montreal, Que.
Eddy, The E. B., Co., Limited, Hull, Que.
Jonquiere Pulp Co., The, Jonquiere, Que.
*Laurentide Paper Co., Limited, The, Grand Mere, Que.
*Miramichi Pulp & Paper Co., Limited, Chatham, N.B.
*Ouiatchouan Pulp Co., Chicoutimi, Que.
Riordon Paper Mills, Limited, The, Montreal, Que. (Adv. page 1046.)
*St. John Pulp & Paper Co., Limited, Mispec, N.B.
Sault Ste. Marie Pulp & Paper Co., The, Sault Ste. Marie, Ont.
Toronto Paper Mfg. Co., The, Cornwall, Ont. (Adv. page 856.)

1998 PULPERS, Root.

*Bell, B., & Son Co., Limited, St. George, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*Noxon Co., Limited, The, Ingersoll, Ont.
*Paris Plow Co., Limited, The, Paris, Ont.
Shantz, P. E., Preston, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.
Tolton Bros., Limited, Guelph, Ont.
Vilas, W. F., Cowansville, Que.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.
*Wilkinson Plow Co., Limited, Toronto, Ont.

1999 PULPITS AND PULPIT CHAIRS.

*Blonde Lumber & Mfg. Co., Limited, The, Chatham, Ont.
*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042.)

2000 PULPSTONE.

Alabastine Co., Limited, The, Paris, Ont.

2001 PULVERIZERS.

*Bell, B., & Son Co., Limited, St. George, Ont.
Gardner, Robert, & Son, Montreal, Que. (Adv. page 1043.)
*Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)
*Watson, John, Mfg. Co., Limited, Ayr, Ont.

2002 PUMPS, Acid and Circulating.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

2003 PUMPS, Air.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Buffalo Forge Co., Limited, Montreal, Que.
*Canadian Rand Co., Limited, Montreal, Que.
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Mitchell, The Robert, Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

2004 PUMPS, Beer.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Mitchell, The Robt., Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2005 PUMPS, Boiler Feed.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
McAvity, T., & Sons, St. John, N.B.
McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

2006 PUMPS, Centrifugal.

Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864.)
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Buffalo Forge Co., Limited, Montreal, Que.
Computing Scale Co. of Canada, Limited, Toronto, Ont.
*Goold, Shapley & Muir Co., Limited, Brantford, Ont.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Park Bros., Chatham, Ont.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

2007 PUMPS, Cistern, Artesian Well and Tank.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Darling Bros., Limited, Montreal, Que.
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)
Plessisville, La Fonderie de, Plessisville, Que.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.

2008 PUMPS, Duplex and Triplex Power.

Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

2009 PUMPS, Electrical.

Canadian Buffalo Forge Co., Limited, Montreal, Que.

2010 PUMPS, Fire.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Buffalo Forge Co., Limited, Montreal, Que.
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
*Vogel, H. G., Co., Montreal, Que. (Adv. page 1038.)

2011 PUMPS, Hydraulic Pressure.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Buffalo Forge Co., Limited, Montreal, Que.
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
*Perrin, Wm. R., & Co., Limited, Toronto, Ont. (Adv. page 863.)
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

2012 PUMPS, Iron, Force and Lift.

*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Goold, Shapley & Muir Co., Limited, Brantford, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)
Plessisville, La Fonderie de, Plessisville, Que.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
Stratford Bridge & Iron Works Co., Stratford, Ont.
Woodstock Wind-Motor Co., Limited, Woodstock, Ont.
*Wortman & Ward Co., Limited, The, London, Ont.

2013 PUMPS, Oil.

Bowser, S. F., & Co., Limited, Toronto, Ont.
*Hamilton Brass Mfg. Co., Limited, The, Hamilton, Ont.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

2014 PUMPS, Pitcher.

*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)

2015 PUMPS, Ship.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

2016 PUMPS, Spray.

Smart, The Jas., Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

2017 PUMPS, Steam Power (For Mines, Paper and Pulp Mills and Tanneries).

*Berg Brick Machinery Co., Limited, The, Toronto, Ont.
*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Buffalo Forge Co., Limited, Montreal, Que.
Darling Bros., Limited, Montreal, Que.
*Drolet, F. X., Quebec, Que.
*Fairbanks Morse Canadian Mfg. Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044.)
*Leonard, E., & Sons, London, Ont. (Adv. page 1047.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Moir, W. & A., Halifax, N.S.
*Mussens, Limited, Montreal, Que.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

2018 PUMPS, Test and Veterinary.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2019 PUMPS, Turbine.

Canadian Buffalo Forge Co., Limited, Montreal, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)

2020 PUNCHES AND SHEARS.

*Banfield, W. H., & Sons, Toronto, Ont. (Adv. page 1048.)
Canadian Buffalo Forge Co., Limited, Montreal, Que.
Jardine, A. B., & Co., Hespeler, Ont.
*London Machine Tool Co., Limited, The, Hamilton, Ont. (Adv. page 1016.)
*MacGregor, Gourlay Co., Limited, Galt, Ont.
*Pratt & Whitney Co. of Canada, Limited, Dundas, Ont. (Adv. page 828.)

2021 PUTTY.

*Brandram-Henderson, Limited, Montreal, Que. (Adv. page 840.)
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Moore, Benjamin, & Co., Limited, West Toronto, Ont.
Muirhead, A., Toronto, Ont.
*Pendray, W. J., Victoria, B.C.
*Ramsay, A., & Son Co., Montreal, Que.
Robertson, The James, Co., Limited, Montreal, Que.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
Stephens, G. F., & Co., Limited, Winnipeg, Man.

2022 PUTTY, Stove.

Robertson, The James, Co., Limited, Montreal, Que.
*Sterne, G. F., & Sons, Brantford, Ont.

2023 PYJAMAS.

Rideau Mfg. Co., The, Ottawa, Ont.
*Standard Shirt Mfg. Co., Limited, The, Montreal, Que.

2024 PYROGRAPHY SUPPLIES.

Acme Supply Co., Limited, The, Toronto, Ont.

Q

2025 QUARTZ, Ground.

*Electric Reduction Co., Limited, The, Buckingham, Que.

2026 QUILTS.

Alaska Feather & Down Co., Limited, Montreal, Que. (Adv. page 860.)
*Canadian Feather & Mattress Co., Limited, The, Toronto, Ont.
*Dominion Textile Co., Limited, Montreal, Que.

R

2027 RACKS, Book (Folding).
Otterville Mfg. Co., Limited, Otterville, Ont.

2028 RACKS, Communion Cup.
Valley City Seating Co., Limited, The, Dundas, Ont.

2029 RACKS, Forebay.
Canada Foundry Co., Limited, Toronto. Ont. (Adv. page 993.)

2030 RACKS, Hall.
Berlin Furniture Co., Limited, The, Berlin, Ont.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
*Coombe & Watson, Kincardine, Ont.
*Hibner, The D., Furniture Co., Limited, Berlin, Ont.
Knechtel Furniture Co., Limited, The, Hanover, Ont.
Lippert & Co., Berlin, Ont.
McLagan, The George, Furniture Co., Limited, Stratford, Ont.
Meaford Mfg. Co., Limited, The, Meaford, Ont.

2031 RACKS, Hay and Stock.
Adams Wagon Co., Limited, Brantford, Ont.
*Bain Wagon Co., Limited, The, Woodstock, Ont.

2032 RACKS, Shoe.
*Constantin & O'Brien, Montreal, Que.

2033 RACKS AND REELS, Hose.
*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
London Foundry Co., Limited, The, London, Ont.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
*Watson, The John, Mfg. Co., Limited, Ayr, Ont.
*Wilkinson Plow Co., Limited, The, Toronto, Ont.
*Wilson & Cousins, Toronto, Ont.

2034 RADIATORS, Hot Water and Steam.
*Clare Bros. & Co., Limited, Preston, Ont.
*Dominion Radiator Co., Limited, The, Toronto, Ont.
*Gurney Foundry Co., Limited, The, Toronto, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Taylor-Forbes Co., Limited, Guelph, Ont.
Tilden, Gurney & Co., Limited, Winnipeg, Man.

2035 RADIATORS, Luminous Electric.
Canadian General Electric Co., Limited, Toronto, Ont.

2036 RAILINGS, Brass.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Chadwick Bros., Hamilton, Ont.
*Garth Co., The, Montreal, Que.
*Hamilton Brass Mfg. Co., Limited, The, Hamilton, Ont.
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)
Mitchell, The Robt., Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
*Parkin Elevator Co., Limited, The, Hespeler, Ont.
Toronto Brass Mfg. Co., Toronto, Ont.
Watson, John, & Son, Montreal, Que.

2037 RAILINGS, Iron.
*Belanger, A., Montmagny, Que.
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1044.)
*Garth Co., The, Montreal, Que.
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)
Mitchell, The Robt., Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
*Parkin Elevator Co., Limited, The, Hespeler, Ont.
*Schmidt & Co., Winnipeg, Man.
Watson, John, & Son, Montreal, Que.

2038 RAILINGS, Wood, for Altars, Banks, Etc.
Cushing Bros. Co., Limited, Calgary, Alta.
Dempster, James, & Co., Halifax, N.S.
*Harrison, John. & Sons Co., Limited, Owen Sound, Ont.
Lemon, Gonnason & Co., Victoria, B.C.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042.)

2039 RAILS, Bed (Hollow Steel).
*Munro Wire Works, Limited, New Glasgow, N.S.

2040 RAILS, Bessemer Steel.
Algoma Steel Co., Limited, The, Sault Ste. Marie, Ont. (Adv. page 1059.)

2041 RAILS, Dash.
*Skinner Co., Limited, The, Gananoque, Ont.

2042 RAILS, Light and Mining.
Peck Rolling Mills, Limited, The, Montreal, Que.

2043 RAILS, Steel, Open Hearth.
Algoma Steel Co., Limited, The, Sault Ste. Marie, Ont. (Adv. page 1059.)
*Dominion Iron & Steel Co., Limited, Sydney, N.S.

2044 RAILWAYS, Street, Electric.
Montreal Street Railway Co., Montreal, Que.

2045 RAKES, Garden.
Bedford Mfg. Co., The, Bedford, Que.
*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
*Welland Vale Mfg. Co., Limited, The, St. Catharines, Ont. (Adv. page 1040.)

2046 RAKES, Horse Hay.
*Cossitt Co., Limited, The, Brockville, Ont.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*International Harvester Co., Limited, Hamilton, Ont. (Adv. page 848.)
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Maxwell, David, & Sons, St. Mary's, Ont.
*Noxon Co., Limited, The, Ingersoll, Ont.
Shantz, P. E., Preston, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.

2047 RAKES, Side Delivery.
*Cossitt Co., Limited, The, Brockville, Ont.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Maxwell, David, & Sons, St. Mary's Ont.
Shantz, P. E., Preston, Ont.

2048 RAKES, Wood (Hand).
Bedford Mfg. Co., The, Bedford, Que.
*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852.)
*Dominion Snath Co., The, Waterville, Que.
Gignac, J. H., Limited, Quebec, Que.
*Lachute Shuttle Co., Limited, The, Lachute Mills, Que.
*Still, J. H., Mfg. Co., Limited, The, St. Thomas, Ont.

2049 RAMS, Hydraulic.
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)

2050 RANGES, Gas.
Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
*Gurney Foundry Co., Limited, The, Toronto, Ont.

2051 RANGES, Hotel.
*Gurney Foundry Co., Limited, The, Toronto, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Prowse, Geo. R., Montreal, Que.
Western Foundry Co., Limited, The, Wingham, Ont.

2052 RANGES, Household.
*Amherst Foundry Co., Limited, Amherst, N.S. (Adv. page 849.)
*Belanger, A., Montmagny, Que.
Bowes, Jamieson & Co., Hamilton, Ont.
Buck, The Wm., Stove Co., Limited, Brantford, Ont.
Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
*Clare Bros. & Co., Limited, Preston, Ont.
Copp, W. J., Son & Co., Fort William, Ont.
Doherty Mfg. Co., Limited, Sarnia, Ont.
Farquhar Bros., Halifax, N.S.
Findlay Bros. Co., Limited, Carleton Place, Ont.
Guelph Stove Co., Limited, Guelph, Ont.
*Gurney Foundry Co., Limited, The, Toronto, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Hillis & Sons, Limited, Halifax, N.S.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)
McLean, Holt & Co., St. John, N.B.
*Moffatt Stove Co., Limited, The, Weston, Ont.
*Moore, The D., Co., Limited, Hamilton, Ont.
Record Foundry & Machine Co., Moncton, N.B.
Shaw & Mason, Limited, Sydney, N.S.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Stewart, The James, Mfg. Co., Limited, Woodstock, Ont.
Tilden, Gurney & Co., Limited, Winnipeg, Man.
Walker Steel Range Co., Limited, Grimsby, Ont.
Western Foundry Co., Limited, The, Wingham, Ont.
Windsor Foundry & Machine Co., Limited, Windsor, N.S.

2053 RANGES, Steel.
*Amherst Foundry Co., Limited, Amherst, N.S. (Adv. page 849.)
Findlay Bros. Co., Limited, Carleton Place, Ont.
McLennan, McFeely & Co., Limited, Vancouver, B.C.
*Moore, The D., Co., Limited, Hamilton, Ont.
*National Mfg. Co., Limited, The, Pembroke, Ont.
Prowse, Geo. R., Montreal, Que.
Walker Steel Range Co., Limited, Grimsby, Ont.
Western Foundry Co., Limited, The, Wingham, Ont.

2054 RATCHETS.
*Pratt & Whitney Co. of Canada, Limited, Dundas, Ont. (Adv. page 828.)

2055 RAWHIDE.
*Barrie Tanning Co., Limited, The, Barrie, Ont. (Adv. page 1041.)
*Wickett & Craig, Limited, Toronto, Ont.

2056 RAZORS.
Auto Strop Safety Razor Co., Limited, The, Montreal, Que. (Adv. page 1013.)
*Gillette Safety Razor Co., Montreal, Que. (Adv. page 875.)
*Jones Bros. & Co., Limited, Toronto, Ont.

2057 REAMERS.
Hamilton Tool Co., Limited, Hamilton, Ont.
Jardine, A. B., & Co., Hespeler, Ont.
*Pratt & Whitney Co. of Canada, Limited, Dundas, Ont. (Adv. page 828.)
*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

2058 REAPERS.
*Cossitt Co., Limited, The, Brockville, Ont.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*International Harvester Co. of Canada, Limited, Hamilton, Ont. (Adv. page 848.)
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Maxwell, David, & Sons, St. Mary's, Ont.
*Noxon Co., Limited, The, Ingersoll, Ont.

2059 RECEIVERS, Air.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

2060 RECEIVERS, Steam
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

2061 RECORDERS, Time.
*Canadian Time Recording Co., Limited, The, Toronto, Ont.
Wood, W. A., Montreal, Que. (Adv. page 857.)

2062 RECORDS, Gramophone.
Berliner Gramophone Co., Limited, The, Montreal, Que.

2063 REEDS, Loom.
*McLaren, The J. C., Belting Co., Montreal, Que. (Adv. page 1017.)

2064 REELS, Clothes Line.
Taylor-Forbes Co., Limited, Guelph, Ont.

2065 REELS AND WAGONS, Fire Hose.
Boyce Carriage Co., The, Winnipeg, Man.
*Seagrave, W. E., Walkerville, Ont.
Smith Bros., Toronto, Ont.
Truro Carriage Co., Truro, N.S.

2066 REFLECTORS, Chandelier and Electric.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2067 REFLECTORS, Mirror (Window and Show Case).
Piper, The Hiram L., Co., Limited, Montreal, Que.
*Piper, The N. L., Railway Supply Co., Limited, Toronto, Ont.

2068 REFRIGERATING MACHINERY.

See Machinery, Refrigerating.

2069 REFRIGERATORS.

*Cossitt Co., Limited, The, Brockville, Ont.
*Cumming Mfg. Co., Limited, The, Renfrew, Ont.
Davidson, James, Ottawa, Ont.
Fletcher Mfg. Co., Limited, Toronto, Ont.
Ham & Nott Co., Limited, Brantford, Ont.
*Heurd & Co., Limited, London, Ont.
Linde British Refrigeration Co., Limited, The, Montreal, Que. (Adv. page 867.)
Prowse, Geo. R., Montreal, Que.
*Sanderson-Harold Co., Limited, Paris, Ont.
*Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Sussex Mfg. Co., Limited. The, Sussex, N.S.

2070 REGALIA, Society and Lodge.

*Dominion Regalia Co., Limited, The, Toronto, Ont.
Mortimore & Blackeby, Toronto, Ont.

2071 REGISTERS, Cash.

National Cash Register Co, The, Toronto, Ont.

2072 REGISTERS, Hot Air.

Buck, The Wm., Stove Co., Limited, Brantford, Ont.
Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
*Clare Bros. & Co., Limited, Preston, Ont.
Guelph Stove Co., Limited, Guelph, Ont.
*Gurney Foundry Co., Limited, The, Toronto, Ont
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Ives, The H. R., Co., Limited, Montreal, Que.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)
*Pease Foundry Co., Limited, Toronto, Ont.
*Pease-Waldon Co., Limited, Winnipeg, Man.
Plessisville, La Fonderie de, Plessisville, Que.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Stewart, The James, Mfg. Co., Limited, Woodstock, Ont.
Toronto Furnace & Crematory Co., Limited, Toronto, Ont.

2073 REINFORCEMENTS, Concrete.

*London Fence Machine Co., Limited, London, Ont.
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co. of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995.)

2074 REMOVER, Paint and Varnish.

*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
*Moore, Benjamin, & Co., Limited, West Toronto, Ont.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.

2075 REPLACERS, Car and Locomotive.

*Holden, N. J., Co., Limited, Montreal, Que.

2076 RESAWS.

*Ballantine, John, & Co., Limited, Preston, Ont.
*Berlin Machine Works, Limited, Hamilton, Ont.
*Clark-Demill Co., Limited, Hespeler, Ont. (Adv. page 838.)
Cowan & Co. of Galt, Limited, Galt, Ont.
Plessisville, La Fonderie de, Plessisville, Que.
*St. John Iron Works, Limited, St. John, N.B.
*Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861.)

2077 RESIN.

Lockerby & McComb, Montreal, Que. (Adv. page 1047.)

2078 RETORTS AND CONDENSERS, Amalgam.

Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

2079 RETORTS, Canning Factory (Processing).

*Brown, Boggs Co., Limited, The, Hamilton, Ont.
*Letson & Burpee, Limited, Vancouver, B.C.
*Wilson, J. C., & Co., Glenora, Ont.

2080 RHEOSTATS, Electric.

Canadian General Electric Co., Limited, Toronto, Ont.
Canadian Westinghouse Co., Limited, Hamilton, Ont.

2081 RIBBONS, Silk.

*Belding, Paul, & Co., Limited, Montreal, Que.

2082 RIBBONS, Typewriter.

*Ault & Wiborg Co. of Canada, Limited, The, Toronto, Ont.
*Carbon Paper & Ribbon Mfg. Co., Limited, Toronto, Ont.
*Underwood, John, & Co., Toronto, Ont.
*United Typewriter Co., Limited, Toronto, Ont. (Adv. page 1032.)

2083 RICE AND RICE PRODUCTS.

Mount Royal Milling & Mfg. Co., Montreal, Que.

2084 RIDDLES. Foundry.

Hamilton Facing Mill Co., Limited, Hamilton, Ont.
Major Mfg. Co., Limited, The, Montreal, Que.

2085 RIMS, Wood (Bicycle).

*Canada Cycle & Motor Co., Limited, West Toronto, Ont. (Adv. opp. Inside Back Cover.)

2086 RIMS, Wood (Buggy, Carriage, Etc.)

Ackland, D., & Son, Limited, Winnipeg, Man.
*Canada Wheel Works Limited, The, Merritton, Ont.
*Chatham Bent Goods Co., Limited, The, Chatham, Ont.
Crown Lumber Co., Limited, The, Woodstock, Ont.
Heard, John, & Co., St. Thomas, Ont.
Hore, F. W., & Son, Limited, Hamilton, Ont.
Loughead Bros., Limited, Sarnia, Ont.
McVean, O. & W., Dresden, Ont.
*Victoria Wheel Works, Galt, Ont. (Adv. page 843.)
West Lorne Wagon Co., Limited, West Lorne, Ont.
*Windsor Turned Goods Co., Limited, The, Windsor, Ont.

2087 RINGS, Martingale.

Arlington Co. of Canada, Limited, Toronto, Ont.

2088 RINGS, Rubber.

*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
Durham Rubber Co., Limited, The, Bowmanville, Ont. (Adv. page 844.)

2089 RINSERS, Bottle.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2090 RIVETERS, Jaw.

*Canadian Rand Co., Limited, Montreal, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)

2091 RIVETS, Belt.

Brantford Screw Co., Limited, Brantford, Ont. (Adv. page 858.)
Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Crescent Oil Co., The, Hamilton, Ont.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)

2092 RIVETS, Copper and Brass.

Brantford Screw Co., Limited, Brantford, Ont. (Adv. page 858.)
Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)

2093 RIVETS, Iron and Steel.

Brantford Screw Co., Limited, Brantford, Ont. (Adv. page 858.)
*Canadian Drawn Steel Co., Limited, The, Hamilton, Ont. (Adv. page 1028.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
London Rolling Mill Co., Limited, London, Ont.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)
*Starr Mfg. Co., Limited, Dartmouth, N.S.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

2094 RIVETS, Slotted or Bifurcated.

*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)

2095 RIVETS, Tubular.

*Parmenter & Bulloch Co., Limited, The Gananoque, Ont. (Adv. page 1024.)

2096 ROBES, Astrachan.

Newlands & Co., Galt, Ont.
Penmans, Limited, Paris, Ont. (Adv. page 1063.)

2097 ROBES, Burial.

*Girard & Godin, Three Rivers. Que.
*Globe Casket Co., The, London, Ont.
*National Casket Co., Toronto, Ont.
*Semmens & Evel Casket Co., Limited, The, Hamilton, Ont.
Thompson, The D. W., Co., Limited. Toronto, Ont.

2098 ROBES, Fur.

Allan, A. A., & Co., Toronto, Ont.
Boulter, Waugh & Co., Limited, Montreal, Que.
Bourdeau & Son, Montreal, Que.
*Brereton & Manning, Toronto, Ont.
*Holt, Renfrew & Co., Quebec, Que.
*Laliberte, J. B., Quebec, Que.

2099 ROCKERS.

See Chairs.

2100 RODS, Brass.

*Canada Brass Rolling Mills, Limited, Toronto, Ont.
*Hahn Brass Co., Limited, The, New Hamburg, Ont.
*Hamilton Brass Mfg. Co., Limited, The, Hamilton. Ont.
*McAvity, T.. & Sons, St. John, N.B.
Mitchell, The Robert, Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Robertson, The James, Co., Limited, Montreal, Que.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

2101 RODS, Engine.

*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Leonard, E., & Sons, London, Ont. (Adv. page 1047.)
Plessisville, La Fonderie de, Plessisville, Que.
*Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861.)

2102 RODS (Iron and Steel) Truss and Bridge.

Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.

2103 RODS, Piston and Pump.

*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Union Drawn Steel Co., Limited, Hamilton, Ont. (Adv. page 1028.)

2104 RODS, Stove.

Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.

2105 RODS, Wire.

*Dominion Iron & Steel Co., Limited, Sydney, N.S.

2106 ROLLERS, Blind and Window Shade.

Stewart Hartshorn Co., Toronto, Ont.

2107 ROLLERS, Garden and Lawn.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
London Foundry Co., Limited, The, London, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
*Watson, John, Mfg. Co., Limited, Ayr, Ont.
*Wilkinson Plow Co., Toronto, Ont.

2108 ROLLERS, Land.

*Bell, B., & Son Co., Limited, St. George, Ont.
*Bissell, T. E., Co., Limited, Elora, Ont.
*Cockshutt Plow Co., Limited, Brantford, Ont.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*International Harvester Co. of Canada, Limited, Hamilton, Ont. (Adv. page 848.)
*Maxwell, David, & Sons, St. Mary's, Ont.
*Shantz, P. E., Preston, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.
*Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)
Vilas, W. F., Cowansville, Que.
*Wilkinson Plow Co., Toronto, Ont.

2109 ROLLERS, Printers'.

*Ault & Wiborg Co. of Canada, Limited, The, Toronto, Ont.
*Canada Printing Ink Co., Limited, Toronto, Ont.
Manton Bros., Toronto. Ont.
*Toronto Type Foundry Co., Limited, Winnipeg, Man.

2110 ROLLERS, Road (Horse).

Sawyer & Massey Co., Limited, Hamilton, Ont.

2111 ROLLERS, Road (Steam).

Bell, The Robt., Engine & Thresher Co, Limited, Seaforth, Ont.
Sawyer & Massey Co., Limited, Hamilton, Ont.

*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)

2112 ROLLS, Ore Crushing.

*Jenckes Machine Co., Limited, The, Sherbrooke, Que.

2113 ROLLS, Plate Bending.

*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)

2114 ROLLS, Rubber.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

2115 ROLLS, Steel, For Roller Skates.

Morrow, The John, Screw, Limited, Ingersoll, Ont.

2116 ROLLS, Typewriter.

*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)

2117 ROLLS, Wringer.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

2118 ROOF FRAMES, Steel.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Bridge Co., Limited, The, Walkerville, Ont. (Adv. page 1044.)
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Phœnix Bridge & Iron Works, Limited, The, Montreal, Que.

2119 ROOFING (Prepared) Asphalt, Felt, Pitch and Tarred.

Bird, F. W., & Son, Hamilton, Ont.
*Brantford Roofing Co., Limited, Brantford, Ont.
*Carritte, de B., St. John, N.B.
Eureka Mineral Wool & Asbestos Co., Toronto, Ont. (Adv. page 1012.)
Forbes Roofing Co., Toronto, Ont.
Lockerby & McComb, Montreal, Que. (Adv. page 1047.)
*McArthur, Alex., & Co., Limited, Montreal, Que. (Adv. page 1040.)
*Merrick-Anderson Co., Winnipeg, Man.
*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)
Paterson Mfg. Co., Limited, The, Toronto, Ont.
Shaw & Mason, Limited, Sydney, N.S.

2120 ROOFING, Iron, Copper, Tin and Galvanized.

Aubry, A., & Fils, Montreal, Que.
Farquhar Bros., Halifax, N.S.
Galt Art Metal Co., Limited, The, Galt, Ont. (Adv. page 1034.)
Matthews, A., Toronto, Ont.
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co. of Canada, Limited, Toronto, Ont. (Adv. pages 994-995.)
*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.
*Riddell, John E., Hamilton, Ont.
Wheeler & Bain, Toronto, Ont.

2121 ROOFING, Ruberoid.

*Brantford Roofing Co., Limited. Brantford, Ont.
*Standard Paint Co. of Canada, Limited, The, Montreal, Que.

2122 ROOM PAPER.

See Paper, Wall or Hanging.

2123 ROPE, Cotton, Linen, Jute and Hemp.

*Consumers Cordage Co., Limited, Montreal, Que.
Doon Twine & Cordage Co., Limited, The, Doon, Ont.
Hamilton Cotton Co., Hamilton, Ont. (Adv. page 870.)
Shurly & Derrett, Limited, Toronto, Ont. (Adv. page 845.)

2124 ROPES, Wire.

Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
*Dominion Wire Rope Co., Limited, Montreal, Que. (Adv. page 1026.)
Greening, The B., Wire Co., Limited, Hamilton, Ont.

2125 ROPE DRIVES, Threshing Machine.

Tolton Bros., Limited, Guelph, Ont.

2126 ROSETTES, Electric.

*Munderloh & Co., Montreal, Que.
*Pringle, The R. E. T., Co., Limited, Montreal, Que.

2127 RUBBER GOODS, Moulded Goods and Sundries.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)
Durham Rubber Co., Limited, Bowmanville, Ont. (Adv. page 844.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)
Ontario Rubber Co., The, Toronto, Ont.

2128 RUBBERS.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Granby Rubber Co., Limited, The, Granby, Que.
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)
*Maple Leaf Rubber Co., Limited, The, Port Dalhousie, Ont.
*Merchants Rubber Co., Limited, The, Berlin, Ont.

2129 RUBBER BOOTS AND SHOES.

See Boots and Shoes, Rubber.

2130 RUDDERS, Ship.

Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

2131 RUGS, Axminster, Brussels, Smyrna, Wilton, Wool.

Canadian Axminster Co., Limited, The, Hamilton, Ont.
Guelph Carpet Mills Co., Limited, The, Guelph, Ont.
Toronto Carpet Mfg. Co., Limited, Toronto, Ont.

2132 RUGS, Carriage.

*Auburn Woollen Co., Limited, Peterboro, Ont.
Brook Woollen Co., The, Simcoe, Ont.
*Bruce Mfg. Co., Toronto, Ont.
Glen Woollen Mills, Limited, Glen Williams, Ont.
*Hewson Woollen Mills, Limited, Amherst, N.S.
*Holt, Renfrew & Co., Quebec, Que.
*Montreal Woollen Mills Co., The, Montreal, Que.
*Newlands & Co., Galt, Ont.

2133 RUGS, Waterproof.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)
Dominion Oil Cloth Co., Limited, The, Montreal, Que.
Guelph Oiled Clothing Co., Limited, The, Guelph, Ont.
*Tower Canadian Oiled Clothing Co., Limited, Toronto, Ont.

2134 RULERS, Paper.

Buntin, Gillies & Co., Limited, Hamilton, Ont.
*Copeland-Chatterson-Crain, Limited, Toronto, Ont.
Davis & Henderson, Toronto, Ont.
Fortier, Joseph, Montreal, Que.
Hart & Riddell, Toronto, Ont.
Lovell, The R. J., Co., Limited, Toronto, Ont.
Patrie Publishing Co., Limited, La, Montreal, Que.
Taylor, T. W., Co., Limited, Winnipeg, Man.
*Warwick Bros. & Rutter, Limited, Toronto, Ont.

2135 RUNNERS, Cutter and Sleigh.

Ackland, D., & Son, Limited, Winnipeg, Man.
*Canada Wheel Works, Limited, The, Merritton, Ont.
*Chatham Bent Goods Co., Limited, The, Chatham, Ont.
Crown Lumber Co., Limited, The, Woodstock, Ont.
Heard, John, & Co., St. Thomas, Ont.
Hore, F. W., & Son, Limited, Hamilton, Ont.
Loughead Bros., Limited, Sarnia, Ont.
McVean, O. & W., Dresden, Ont.
*Victoria Wheel Works, Galt, Ont. (Adv. page 843.)
*Windsor Turned Goods Co., Limited, The, Windsor, Ont.

2136 RUNNERS, Sleigh (Fire Depatrment).

*Seagrave, W. E., Walkerville, Ont.

S

2137 SACKS, Flour (Paper).

Lincoln Paper Mills Co., Limited, The, Merritton, Ont.
Wilson, The J. C., & Co., Limited, Montreal, Que.

2138 SACKS, Ore (Jute).

*Smart Bag Co., Limited, The, Montreal, Que. (Adv. page 836.)

2139 SACKS, Pack.

*Ackerman, B. F., Son & Co., Peterboro, Ont.
*Turner, J. J., & Sons, Peterboro, Ont.

2140 SAD IRONS.

See Irons, Sad, etc.

2141 SADDLES, Gig, Cart, Etc.

*Ackerman, B. F., Son & Co., Peterboro, Ont.
Adams Bros. Harness Mfg. Co., Limited, Toronto, Ont.
*Great West Saddlery Co., Limited, The, Winnipeg, Man.

2142 SADDLES, Riding, Military and Cowboy.

Adams Bros. Harness Mfg. Co., Limited, Toronto, Ont.
*Great West Saddlery Co., Limited, The, Winnipeg, Man.
*Heney, E. N., Co., Limited, Montreal, Que.
Jolley, James, & Sons, Limited, Hamilton, Ont.
Kelly's Limited, Halifax, N.S.
*Lamontagne, Limited, Montreal, Que.

2143 SAFES.

*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
*Schmidt & Co., Winnipeg, Man.

2144 SAILS.

*Bromley & Hague, Limited, Winnipeg, Man.
*Dean, Walter, Toronto, Ont.
*Gidley, H. E., & Co., Penetanguishene, Ont.
*Hague, Armington & Co., Limited, Winnipeg, Man.
Leckie, John, Limited, Toronto, Ont.
*Montreal Tent, Awning & Tarpaulin Co., Montreal, Que.
*Peterboro Canoe Co., Limited, The, Peterboro, Ont.
*Sonne, Thos., Sr., Montreal, Que.
*Turner, J. J., & Sons, Peterboro, Ont.

2145 SALMON, Canned.

See Fish, (Salmon) Canned

2146 SALMON, Salted.

*British Columbia Canning Co., Limited, Victoria, B.C.

2147 SALT, Dairy, Table, Fine and Coarse.

*Canadian Salt Co., Limited, The, Windsor, Ont. (Adv. page 1042.)
*Empire Salt Co., Limited, Sarnia, Ont.
Ransford, John, Clinton, Ont.
Saginaw Lumber & Salt Co., Sandwich, Ont.
Western Salt Co., Limited, The, Mooretown, Ont.

2148 SALTS, Glauber, Epsom and Mineral.

Canada Chemical Mfg. Co., Limited, The, London, Ont. (Adv. page 1033.)
Nichols Chemical Co. of Canada, Limited, The, Montreal, Que. (Adv. page 1045.)
Nicholson & Brock, Toronto, Ont.
Toronto Liquid Carbonate Co., Limited, Toronto, Ont.

2149 SANDERS, Mould.

*Doig, A. E., & Co., Toronto, Ont.

2150 SANDPAPER.

Delany & Pettit Co., Limited, The, Toronto, Ont. (Adv. page 1037.)

2151 SASH, Doors and Windows.

See Mills, Planing.

2152 SASH AND FRAMES, Hollow Sheet Metal.

*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co., Limited, The, Toronto, Ont. (Adv. pages 994-995.)
*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.

2153 SASH LIFTS.

Belleville Hardware Co., Limited, The, Belleville, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

2154 SATCHELS.

See Bags, Travelling.

2155 SAUCES AND CATSUPS.

Blackwood's Limited, The, Winnipeg, Man.
*Burlington Canning Co., Limited, The, Burlington, Ont.
*Canadian Canners, Limited, Hamilton, Ont.
*Capstan Mfg. Co., Toronto, Ont.
*Davies, The Wm., Co., Limited, Toronto, Ont.
Drewry, Edward L., Winnipeg, Man.
Dyson Co., The, Winnipeg, Man.
*Gorman, Eckert & Co., Limited, London, Ont.
Lytle, The T. A., Co., Limited, Toronto, Ont.
Northland Mfg. Co., The, Toronto, Ont.

Ozo Co., Limited, The, Montreal, Que.
Quebec Preserving Co., Quebec, Que. (Adv. page 1032.)
Taylor & Pringle Co., Limited, Owen Sound, Ont.
White Star Mfg. Co., The, Winnipeg, Man.

2156 SAUSAGES.

See Pork and Pork Products.

2157 SAW GUMMER.

See Gummer, Saw.

2158 SAW MILLS, Portable.

Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.
Oxford Foundry & Machine Co., Oxford, N.S.
Sawyer & Massey Co., Limited, Hamilton, Ont.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)
*White, The George, & Sons Co., Limited, London, Ont.
Williams, The Madison, Mfg. Co., Limited, Lindsay, Ont.

2159 SAW ARBORS.

See Arbors, Saw.

2160 SAW SETS.

*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
Taylor-Forbes Co., Limited, Guelph, Ont.

2161 SAWS, Band.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
*Ballantine, John, & Co., Limited, Preston, Ont.
*Berlin Machine Works, Limited, Hamilton, Ont.
Burns, The E. R., Saw Co., Limited, Toronto, Ont.
*Burton, The A. J., Saw Co., Limited, Vancouver, B.C.
*Clark-Demill Co., Limited, Hespeler, Ont. (Adv. page 838.)
Cowan & Co. of Galt, Limited, Galt, Ont.
*Disston, Henry, & Sons, Limited, Toronto, Ont.
*Jackson, Cochrane & Co., Berlin, Ont.
*MacGregor, Gourlay Co., Limited, The, Galt, Ont.
*St. Lawrence Saw & Steel Works Co., Limited, Sorel, Que. (Adv. page 844.)
*Shurly & Dietrich, Galt, Ont.
*Simonds Canada Saw Co., Limited, St. Henri, Montreal, Que.

2162 SAWS, Gang and Drag.

Burns, The E. R., Saw Co., Limited, Toronto, Ont.
*Disston, Henry, & Sons, Limited, Toronto, Ont.
*St. Lawrence Saw & Steel Works Co., Limited, Sorel, Que. (Adv. page 844.)
*Simonds Canada Saw Co., Limited, St. Henri, Montreal, Que.

2163 SAWS, Hand.

*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
*St. Lawrence Saw & Steel Works Co., Limited, Sorel, Que. (Adv. page 844.)
*Simonds Canada Saw Co., Limited, St. Henri, Montreal, Que.
Smith, R. H., Co., Limited, St. Catharines, Ont.

2164 SAWS, Metal.

*Holden, N. J., Co., Limited, Montreal, Que.

2165 SAWS, Mill Circular.

*Bessette, La Cie J. & S., Ltee, Iberville, Que.
Burns, The E. R., Saw Co., Limited, Toronto, Ont.
*Burton, The A. J., Saw Co., Limited, Vancouver, B.C.
*Disston, Henry, & Sons, Limited, Toronto, Ont.
*St. Lawrence Saw & Steel Works Co., Limited. Sorel, Que. (Adv. page 844.)
*Shurly & Dietrich, Galt, Ont.
*Simonds Canada Saw Co., Limited, St. Henri, Montreal, Que.
Smith, R. H., Co., Limited, St. Catharines, Ont

2166 SAWS, Power Hack.

Robertson Machinery Co., Limited, The, Welland, Ont.

2167 SAWS, Rip and Cross-Cut.

*Ballantine, John, & Co., Limited, Preston, Ont.
*Berlin Machine Works, Limited, Hamilton, Ont.
Burns, The E. R., Saw Co., Limited, Toronto, Ont.
*Clark-Demill Co., Limited, Hespeler, Ont. (Adv. page 838.)
*Disston, Henry, & Sons, Limited, Toronto, Ont.
*St. Lawrence Saw & Steel Works Co., Limited, Sorel, Que. (Adv. page 844.)
*Shurly & Dietrich, Galt, Ont.
*Simonds Canada Saw Co., Limited, St. Henri, Montreal, Que.
Smith, R. H., Co., Limited, St. Catharines, Ont.
*Welland Vale Mfg. Co., Limited, The, St. Catharines, Ont. (Adv. page 1040.)

2168 SAWS, Wood.

*Gilson Mfg. Co., Limited, Guelph, Ont.
*Holden, N. J., Co., Limited, Montreal, Que.
*Simonds Canada Saw Co., Limited, St. Henri, Montreal, Que.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.
*Welland Vale Mfg. Co., Limited, The, St. Catharines, Ont. (Adv. page 1040.)

2169 SCALES.

Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont.
*Campbell, The Manson, Co., Limited, Chatham, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Computing Scale Co. of Canada, Limited, The, Toronto, Ont.
*Gurney Scale Co., The, Hamilton, Ont.
*National Mfg. Co., Limited, The, Pembroke, Ont.
New Warren Scale Co., Montreal, Que.
Tilden, Gurney & Co., Limited, Winnipeg, Man.

2170 SCALES, Farm.

Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
*Campbell, The Manson, Co., Limited, Chatham, Ont.
*Gurney Scale Co., The, Hamilton, Ont.

2171 SCOOPS, Grain.

*Eclipse Mfg. Co., Limited, The, Ottawa, Ont.

2172 SCOOPS, Steel.

*Canadian Shovel & Tool Co. Limited, The, Hamilton, Ont.
*Jones, D. F., Mfg. Co., Limited, Gananoque, Ont.
Peterboro Shovel & Tool Co., Limited, The, Peterboro, Ont.

2173 SCRAPERS, Road, Wheeled and Drag.

*Bechtels, Limited, Waterloo, Ont.
*Belanger, A., Montmagny, Que.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Meaford Wheelbarrow Co., Limited, The, Meaford, Ont. (Adv. page 1040.)
Sawyer & Massey Co., Limited, Hamilton, Ont.
*Toronto Pressed Steel Co., Limited, The, Toronto, Ont.
*Wilkinson Plow Co., Toronto, Ont.

2174 SCREENS, Art.

Otterville Mfg. Co., Limited, Otterville, Ont.

2175 SCREENS, Cutter.

*Skinner Co., Limited, The, Gananoque, Ont.

2176 SCREENS, Mining.

*Brown Machine Co., The, New Glasgow, N.S.
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)

2177 SCREENS, Pulp and Stamp.

Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861.)

2178 SCREENS, Revolving.

Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.

2179 SCREENS, Window and Door.

Cushing Bros. Co., Limited, Calgary, Alta.
Gignac, J. H., Limited, Quebec, Que.
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
Ham & Nott Co., Limited, Brantford, Ont.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
Kilgour Mfg. Co., Hamilton, Ont.
Long, The Geo., Co., Limited, Sherbrooke, Que.
Otterville Mfg. Co., Limited, Otterville, Ont.
*Paquet & Godbout, St. Hyacinthe, Que.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
*Sanderson-Harold Co., Limited, Paris, Ont.
*Thomas Bros., Limited, St. Thomas, Ont.

2180 SCREENS, Wire.

Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)

2181 SCREW EYES.

Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)

2182 SCREWS, Bedstead, Furniture, Piano Action, Planer Knife.

Morrow, The John, Screw, Limited, Ingersoll, Ont.

2183 SCREWS, Bench.

Brantford Screw Co., Limited, Brantford, Ont. (Adv. page 858.)
Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

2184 SCREWS, Bicycle, Chilled Steel, Collar, Milled Brass, Milled Machine, Set, Sewing Machine, Shoulder and Typewriter.

Morrow, The John, Screw, Limited, Ingersoll, Ont.

2185 SCREWS, Case Hardened.

Morrow, The John, Screw, Limited, Ingersoll, Ont.

2186 SCREWS, Chair.

Brantford Screw Co., Limited, Brantford, Ont. (Adv. page 858.)
Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.

2187 SCREWS, Coach.

London Rolling Mill Co., Limited, London, Ont.
*Starr Mfg. Co., Limited, Dartmouth, N.S.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

2188 SCREWS, Combined, Nut and Wood.

Morrow, The John, Screw, Limited, Ingersoll, Ont.

2189 SCREWS, Deck.

Morrow, The John, Screw, Limited, Ingersoll, Ont.

2190 SCREWS, (Iron) Bench, Clamp, Cheese Press, Cider Press, Office Stool, Organ Stool, Piano Stool, Revolving Chair.

Morrow, The John, Screw, Limited, Ingersoll, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

2191 SCREWS, Jack.

*Bell, B., & Son Co., Limited, St. George, Ont.
London Foundry Co., Limited, The, London, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

2192 SCREWS, Knurled.

Morrow, The John, Screw, Limited, Ingersoll, Ont.

2193 SCREWS, Lag.

*Starr Mfg. Co., Limited, Dartmouth, N.S.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

2194 SCREWS, Machine Cap and Special.

Brantford Screw Co., Limited, Brantford, Ont. (Adv. page 858.)
Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.
*Starr Mfg. Co., Limited, Dartmouth, N.S.

2195 SCREWS, (Plated and Polished) Blued, Bronze, Dowel, Knob, Saw, Shear and Skate.

Morrow, The John, Screw, Limited, Ingersoll, Ont.

2196 SCREWS, Set and Milled.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.
*Starr Mfg. Co., Limited, Dartmouth, N.S.

2197 SCREWS, Thumb.

Brantford Screw Co., Limited, Brantford, Ont. (Adv. page 858.)
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Canadian Billings & Spencer, Limited, Welland, Ont. (Adv. page 1031.)
Morrow, The John, Screw, Limited, Ingersoll, Ont.

2198 SCREWS, Wood (Brass, Iron and Steel).

Brantford Screw Co., Limited, Brantford, Ont. (Adv. page 858.)

Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
*Maritime Nail Co., Limited, St. John, N.B.

2199 SCUFFLERS.

*Bell, B., & Son Co., Limited, St. George, Ont.
*Cossitt Co., Limited, The, Brockville, Ont.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*Maxwell, David, & Sons, St. Mary's, Ont.
*Paris Plow Co., Limited, The, Paris, Ont.
Shantz, P. E., Preston, Ont.
*Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)
*Wilkinson Plow Co., Toronto, Ont.

2200 SCYTHES.

Bedford Mfg. Co., The, Bedford, Que.
*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
*Welland Vale Mfg. Co., Limited, The, St. Catharines, Ont. (Adv. page 1040.)

2201 SEALS, Corporation, Notarial, Society and Wax.

Hamilton Stamp & Stencil Works, Limited, Hamilton, Ont.
*Montreal Stencil Works, Montreal, Que. (Adv. page 1032.)
*Superior Mfg. Co., The, Toronto, Ont. (Adv. page 866.)
Toronto Stamp & Stencil Works, Toronto, Ont.
Walker & Campbell, Montreal, Que.

2202 SEATING, Church, School and Assembly Hall.

*Blonde Lumber & Mfg. Co., Limited, The, Chatham, Ont.
*Canadian Office & School Furniture Co., Limited, Preston, Ont.
*Globe Furniture Co., Limited, The, Walkerville, Ont. (Adv. page 865.)
Rhodes, Curry & Co., Limited, Amherst, N.S.
*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042.)
Vilas, W. F., Cowansville, Que.

2203 SEATS, Car.

Crossen Car Mfg. Co. of Cobourg, Limited, The, Cobourg, Ont.

2204 SEATS, Carriage.

Conboy Carriage Co., Limited, The, Toronto, Ont.
*Guelph Carriage Top Co., Guelph, Ont.

2205 SEATS, Closet.

Gignac, J. H., Limited, Quebec, Que.
*Goderich Organ Co., Limited, The, Goderich, Ont.
Semmens & Evel Casket Co., Limited, Hamilton, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
*Windsor Furniture Co., Limited, Windsor, N.S.

2206 SEATS, Lawn.

Shantz, P. E., Preston, Ont.
Vilas, W. F., Cowansville, Que.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.

2207 SEATS AND MIRRORS, Hall.

See Racks, Hall.

2208 SEATS, Wagon, Suspension.

Wawanesa Wagon Seat Co., The, Wawanesa, Man.

2209 SECRETARIES.

Berlin Furniture Co., Limited, The, Berlin, Ont.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
*Hibner, The D., Furniture Co., Limited, Berlin, Ont.
*Krug, The H., Furniture Co., Limited, Berlin, Ont
Meaford Mfg. Co., Limited, The, Meaford, Ont.

2210 SEED, Bird.

Nicholson & Brock, Toronto, Ont.

2211 SEEDERS.

*Belanger, A., Montmagny, Que.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Cockshutt Plow Co., Limited, Brantford, Ont.
*Faucher & Fils, Montreal, Que.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Hamilton, The Peter, Co., Limited, Peterboro, Ont.
*International Harvester Co., Limited, Hamilton, Ont. (Adv. page 848.)
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Maxwell, David, & Sons, St. Mary's, Ont.
*Noxon Co., Limited, The, Ingersoll, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.
*Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)

2212 SEMAPHORES, Electric.

*McAvity, T., & Sons, St. John, N.B.

2213 SEPARATORS, Cream.

*DeLaval Mfg. Co., The, Montreal, Que.
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*National Mfg. Co., Limited, The, Pembroke, Ont.
*Petrie Mfg. Co., Limited, The, Hamilton, Ont.
*Raymond Mfg. Co. of Guelph, Limited, The, Guelph, Ont.

2214 SEPARATORS, Dust and Shaving.

Sheldons, Limited, Galt, Ont. (Adv. page 859.)

2215 SEPARATORS, Grain.

See Machines, Threshing.

2216 SEPARATORS, Oil and Steam.

*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Darling Bros., Limited, Montreal, Que.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
Sheldons, Limited, Galt, Ont. (Adv. page 859.)
*Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861.)

2217 SERGES.

See Cloth, Serge.

2218 SETTEES.

*Coombe & Watson, Kincardine, Ont.
*Cumming Mfg. Co., Limited, The, Renfrew, Ont.
Dennis Wire & Iron Works Co., Limited, The, London, Ont. (Adv. page 1043.)
*Krug, The H., Furniture Co., Limited, Berlin, Ont.
Shantz, P. E., Preston, Ont.
*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042.)

2219 SETTERS. Tire.

Smart-Turner Machine Co., Limited, The, Hamilton, Ont.

2220 SEWING MACHINES.

See Machines, Sewing.

2221 SHADES, Lamp (Glass).

Hobbs Mfg. Co., Limited, The, London, Ont.
McGuire, W. J., Limited, Toronto, Ont. (Adv. page 1039.)

2222 SHADES, Window.

See Blinds, Window.

2223 SHAFTING.

Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.
*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)
*Canada Forge Co., Limited, Welland, Ont. (Adv. page 1027.)
*Clark-Demill Co., Limited, The, Hespeler, Ont. (Adv. page 838.)
*Dodge Mfg. Co of Toronto, Limited, Toronto Ont. (Adv page 831.)
Fleck, Alexander, Limited, Ottawa, Ont.
Gardner, Robert, & Son, Montreal, Que. (Adv. page 1043)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Nova Scotia Steel & Coal Co., Limited, New Glasgow, N.S. (Adv. page 870.)
*Owen Sound Iron Works Co., Limited, The, Owen Sound, Ont.
Oxford Foundry & Machine Co., Oxford, N.S.
Plessisville, La Fonderie de, Plessisville, Que.
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.
Smart-Turner Machine Co., Limited, The, Hamilton, Ont.
*Stratford Mill Building Co., Limited, The, Stratford, Ont.
Stuart Machinery Co., Limited, The, Winnipeg, Man.
*Union Drawn Steel Co., Limited, Hamilton, Ont. (Adv. page 1028.)
*Wilson, J. C., & Co., Glenora, Ont.

2224 SHAFTING, Cold Drawn.

*Canadian Drawn Steel Co., Limited, The, Hamilton, Ont. (Adv. page 1028.)

2225 SHAFTS, Carriage and Wagon.

Ackland, D., & Son, Limited, Winnipeg, Man.
*Canada Wheel Works, Limited, The, Merritton, Ont.
*Chatham Bent Goods Co., Limited, The, Chatham, Ont.
Heard, John, & Co., St. Thomas, Ont.
Hore, F. W., & Son, Limited, Hamilton, Ont.
Loughead Bros., Limited, Sarnia, Ont.
*Victoria Wheel Works, Galt, Ont. (Adv. page 843.)
*Windsor Turned Goods Co., Limited, The, Windsor, Ont.

2226 SHAPERS, Iron Working.

*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
*MacGregor, Gourlay Co., Limited, The, Galt, Ont.

2227 SHAPERS, Woodworking.

See Machinery, Woodworking.

2228 SHARPENERS, Saw.

*Prescott Emery Wheel Co., Limited, Prescott, Ont.

2229 SHAVINGS, Baled.

Rutherford, The Wm., & Sons Co., Montreal, Que.

2230 SHEARS.

*Banfield, W. H., & Sons, Toronto, Ont. (Adv. page 1048.)
Canadian Buffalo Forge Co., Limited, Montreal, Que.
Hay, The Peter, Knife Co., Limited, Galt, Ont.
Jardine, A. B., & Co., Hespeler, Ont.

2231 SHEATHING, Building.

*Andre Cushing & Co., St. John, N.B. (Adv. page 852.)
Carritte, de B., St. John, N.B.
Christie Woodworking Co., Limited, The, St. John, N.B.
Lockerby & McComb, Montreal, Que. (Adv. page 1047.)
McArthur, Alex., & Co., Limited, Montreal, Que. (Adv. page 1040.)
*Metis Lumber Co., The, Price, Que.
*Montreal, Paper Co., St. Basile, Que.
Paterson Mfg. Co., Limited, The, Toronto, Ont.
St. Croix Paper Co., Limited, Halifax, N.S.
Sault Ste. Marie Pulp & Paper Co., Sault Ste. Marie, Ont.
Spencer Bros. & Turner, Limited, Truro, N.S.

2232 SHEAVES, Iron.

*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)

2233 SHEET METAL BUILDING MATERIAL.

See Building Material, Sheet Metal.

2234 SHEETING, Flannel and Woollen.

Brown & Wigle Co. of Kingsville, Limited, Kingsville, Ont.
*Canadian Colored Cotton Mills Co., Limited, The, Montreal, Que. (Adv. page 846.)
*Dominion Textile Co., Limited, Montreal, Que.
Dontigny, Philip, Arnprior, Ont.
*Morrice, The D., Co., Limited, Montreal, Que.

2235 SHEETING, Rubber.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

2236 SHEETING, Wood.

See Mills, Planing.

2237 SHELLAC.

Berry Bros., Limited, Walkerville, Ont.
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
Domestic Specialty Co., Limited, Hamilton, Ont.
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
Langmuir, James, & Co., Limited, Toronto, Ont.
*McCaskill, Dougall & Co., Montreal, Que. (Adv. page 1047.)
*Martin Senour Co., Limited, The, Montreal, Que.
*Pendray, W. J., Victoria, B.C.
*Ramsay, A., & Son Co., Montreal, Que.
*Scarfe & Co., Brantford, Ont.
Sherwin-Williams Co., The, Montreal, Que.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.

2238 SHELLERS, Corn.

*Cossitt Co., Limited, The, Brockville, Ont.
*Maxwell, David, & Sons, St. Mary's, Ont.
Otterville Mfg. Co., Limited, Otterville, Ont.
*Sylvester Mfg. Co., Limited, The, Lindsay, Ont.

*Watson, John, Mfg. Co., Limited, Ayr, Ont.

2239 SHELVING.

See Mills, Planing.

2240 SHELVING, Metallic and Roller.

*Eclipse Mfg. Co., Limited, The, Ottawa, Ont.
Office Specialty Mfg. Co., Limited, The, Toronto, Ont.

2241 SHIELDS, Dress.

Crompton Corset Co., Limited, Toronto, Ont.

2242 SHINGLES.

*Andre Cushing & Co., St. John, N.B. (Adv. page 852.)
Booth, J. R., Ottawa, Ont.
*B. C. Mills, Timber & Trading Co., Vancouver, B.C.
*Brunette Saw Mill Co., Limited, New Westminster, B.C.
*Burrill Lumber Co., The, Shawinigan Falls, Que.
Canada Shingle Co., Limited, Vancouver, B.C.
*Carew, John, Lindsay, Ont.
*Charlemagne & Lac Ouareau Lumber Co., The, Montreal, Que.
Columbia River Lumber Co., Limited, Golden, B.C.
Davidson, James, Ottawa, Ont.
*Dickie, The Alfred, Lumber Co., Limited, Stewiacke, N.S
*Dominion Paper Co., Montreal, Que.
Elliott, James S., & Son, Prescott, Ont.
*Empire Lumber Co., Limited, Toronto, Ont.
*Gillies Bros., Limited, Braeside, Ont.
*Grier, G. A., & Son, Montreal, Que.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
Hastings Shingle Mfg. Co., Limited, Vancouver, B.C.
*Heaps, E. H., & Co., Vancouver, B.C. (Adv. page 850.)
*Keenan Bros., Limited, Owen Sound, Ont.
*Kennedy Island Mill Co., Riviere du Loup, Que.
*Kootenay Shingle Co, Salmo, B.C.
*Laidlaw, R., Lumber Co., Limited, Toronto, Ont.
*Maclaren, The James, Co., Limited, Buckingham, Que.
*Metis Lumber Co., The, Price, Que.
Mineral Range Iron Mining Co., Limited, The, Bessemer, Ont.
Mossom Boyd Co., Bobcaygeon, Ont.
*Murray & Gregory, Limited, St. John, N.B.
Pacific Coast Lumber Mills, Limited, Vancouver, B.C.
*Parry Sound Lumber Co., Limited, The, Toronto, Ont. (Adv. page 1038.)
Patterson-Tilley Co., The, Hamilton, Ont.
Pearce Co., Limited, The, Marmora, Ont.
*Pigeon River Lumber Co., Port Arthur, Ont.
Playfair & White, Midland, Ont.
Porto Rico Lumber Co., Limited, Nelson, B.C.
Quance Bros., Delhi, Ont.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
*Robertson & Hackett, Vancouver, B.C.
*Sayward, J. A., Victoria, B.C.
Sheppard, James, & Son, Sorel, Que.
*Shives Lumber Co., Limited, Campbellton, N.B.
*Smith, John B., & Sons, Limited, Toronto, Ont.
Sprague Lumber Co., Limited, The, Winnipeg, Man.
*Terminal Lumber & Shingle Co., Limited, The, Vancouver, B.C.
*Victoria Harbor Lumber Co., Limited, Toronto, Ont.
*Victoria Lumber & Mfg. Co., Limited, Chemainus, B.C.
Woods & Spicer, Limited, Vancouver, B.C.
Yale Columbia Lumber Co., Limited, Nakusp, B.C.

2243 SHINGLES, Metal and Steel.

Aubry, A., & Fils, Montreal, Que.
Galt Art Metal Co., Limited, The, Galt, Ont. (Adv. page 1034.)
*Kemp Mfg. & Metal Co., Limited, The, Winnipeg, Man.
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co. of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995.)
*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.
Winnipeg Ceiling & Roofing Co., Winnipeg, Man.

2244 SHIPS, Passenger and Freight.

See Boats, Steamers and Yachts.

2245 SHIRTS, Balbriggan.

Penmans Limited, Paris, Ont. (Adv. page 1063.)

2246 SHIRTS, Cotton (Men's).

Braime, T. E., & Co., Limited, Toronto, Ont.
Crescent Mfg. Co., Limited, Montreal, Que.
Deacon Shirt Co., The, Belleville, Ont.
Dominion Shirt Co., Quebec, Que.
Goodhue, J. B., Rock Island, Que.
Henderson Mfg. Co., The, Winnipeg, Man.
London Pant, Overall & Shirt Mfg. Co., Limited, London, Ont.
*Montreal Suspender & Umbrella Mfg. Co., Montreal, Que.
*Peck, John W., & Co., Limited, Montreal, Que. (Adv. page 837.)
Piercy, J., & Co., Victoria, B.C.
Rideau Mfg. Co., The, Ottawa, Ont.
Ross, The C., Co., Limited, Ottawa, Ont.
*Standard Shirt Mfg. Co., Limited, Montreal, Que.
*Turner, Beeton & Co., Limited, Victoria, B.C.
Van Allen Co., Limited, Hamilton, Ont.
Wilkins, Robert C., Montreal, Que.
Williams, Greene & Rome Co. of Berlin, Limited, The, Berlin, Ont.

2247 SHIRTS, Top (Woollen).

Braime, T. E., & Co., Limited, Toronto, Ont.
Carss Mackinaw Clothing Co., Orillia, Ont.
Deacon Shirt Co., The, Belleville, Ont.
*Hudson Bay Knitting Co., The, Montreal, Que.
Penmans Limited, Paris, Ont. (Adv. page 1063.)
Schofield Woollen Co., Limited, The, Oshawa, Ont.
Simpson, Joseph, Sons, Toronto, Ont.
*Standard Shirt Mfg. Co., Limited, The, Montreal, Que.
*Woods Limited, Ottawa, Ont.

2248 SHIRTS, Under.

See Underwear.

2249 SHIRTWAIST SUITS.

See Blouses and Shirtwaists.

2250 SHODDIES, Wool.

Montreal Blanket Co., The, Montreal, Que. (Adv. page 846.)
*Smith Mfg. Co., Limited, The, Toronto, Ont.

2251 SHOE FACTORY SUPPLIES.

*United Shoe Machinery Co. of Canada, Montreal, Que.

2252 SHOE FINDINGS.

See Heels and Heel Stock; Stiffeners, etc.

2253 SHOE LININGS.

See Linings, Shoe.

2254 SHOE PACKS.

*Beal Bros., Toronto, Ont. (Adv. page 868.)
*Palmer, John, Co., Limited, Fredericton, N.B.
*Peters Sons, C. H., St. John, N.B.

2254A. SHOE-TREES.

*Canada Last Co., Limited, Toronto, Ont.

2255 SHOES, Car Brake.

*Holden, N. J., Co., Limited, Montreal, Que.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Rhodes, Curry & Co., Limited, Amherst, N.S.

2256 SHOES, Infants' Soft Sole.

*Hurlbut Co., Limited, The, Preston, Ont.
Jacobi, Philip, Toronto, Ont.
*Packard, L. H., & Co., Limited, Montreal, Que.

2257 SHOES, Leather.

See Boots and Shoes, Leather.

2258 SHOES, Rubber.

See Boots and Shoes, Rubber.

2259 SHOES, Snow.

*Holt, Renfrew & Co., Quebec, Que.
*Laliberte, J. B., Quebec, Que.
Paquet Co., Limited, The, Quebec, Que.
*Ross, Henry, Indian Lorette, Que.
*Woods Limited, Ottawa, Ont.

2260 SHOOKS, Box, Barrel and Cask.

See Cases, Wooden, Packing and Shook.

2261 SHORTS.

See Feeds.

2262 SHOT.

*Montreal Rolling Mills Co., Montreal, Que., (Adv. page 842.)
Robertson, The James, Co., Limited, Montreal, Que.
Somerville, Limited, Toronto, Ont. (Adv. Outside Back Cover.)

2263 SHOVELS, Fire.

*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

2264 SHOVELS, Snow (Iron or Steel).

*Canadian Shovel & Tool Co., Limited, The, Hamilton, Ont.
*Eclipse Mfg. Co., Limited, Ottawa, Ont.
*Jones, D. F., Mfg. Co., Limited, Gananoque, Ont.
Kemp Mfg. Co., Toronto, Ont.
Peterboro Shovel & Tool Co., Limited, The, Peterboro, Ont.

2265 SHOVELS, Steam.

Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864.)
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Montreal Locomotive Works, Limited, Montreal, Que.
*Mussens, Limited, Montreal, Que.

2266 SHOVELS, Steel.

*Dodge Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
*Jones, D. F., Mfg. Co., Limited, Gananoque, Ont.
Peterboro Shovel & Tool Co., Limited, The, Peterboro, Ont.

2267 SHOW CASES.

See Cases, show.

2268 SHOWERS, Bath.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2269 SHUTTERS.

See Blinds, window (wood).

2270 SHUTTERS, Iron and Metal.

Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)
*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.

2271 SHUTTLES.

*Lachute Shuttle Co., Limited, The, Lachute Mills, Que.

2272 SIDEBOARDS.

Baird Bros., Plattsville, Ont.
Ball Furniture Co., Limited, The, Hanover, Ont.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
Gibbard Furniture Co., of Napanee, Limited, The, Napanee, Ont.
*Knechtel Furniture Co., Limited, The, Hanover, Ont.
Listowel Furniture Co., Limited, The, Listowel, Ont.
McLagan, The George, Furniture Co., Limited, Stratford, Ont.
*Malcolm, Andrew, Furniture Co., Limited, Kincardine, Ont.
Meaford Mfg. Co., Limited, The, Meaford, Ont.
*Oliver, J., & Sons, Limited, Ottawa, Ont.
*St. Lawrence Furniture Co., The, Fraserville, Que.
Stratford Chair Co., Limited, The, Stratford, Ont.
Strathroy Furniture Co., Limited, The, Strathroy, Ont.
*Windsor Furniture Co., Limited, Windsor, N.S.
World Furnishing Co., Limited, The, Orillia, Ont.

2273 SIDING, Iron, Steel, and Metal.

Galt Art Metal Co., Limited, The, Galt, Ont. (Adv. page 1034.)
*Kemp Mfg. Co., Toronto, Ont.
*Kemp Mfg. & Metal Co., Limited, The, Winnipeg, Man.
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995.)
*Ormsby, A. B., Limited, Toronto, Ont., (Adv. page 1039.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.
Wheeler & Bain, Toronto, Ont.
Winnipeg Ceiling & Roofing Co., Winnipeg, Man.

2274 SIDING, Wood.

See Lumber or Mills, planing.

2275 SIEVES, Flour, Meal, Moulders', Sand.

Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
Hamilton Facing Mill Co., Limited, Hamilton, Ont.

2276 SIFTERS, Flour.

Gardner, Robt., & Son, Montreal, Que. (Adv. page 1043.)
*Wright, E. T., & Co., Hamilton, Ont.

2277 SIGHTS, Rifle.

*Sutherland Rifle Sight Co., Limited, The, New Glasgow, N.S.

2278 SIGNALS AND SIGNALLING APPARATUS, FOG.

*Canadian Fog Signal Co., Limited, The, Toronto, Ont.

2279 SIGNALS, Semaphore and Station.

*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041.)
Piper, The Hiram L., Co., Limited, Montreal, Que.
*Piper, The N. L., Railway Supply Co., Limited, Toronto, Ont.

2280 SIGNS, Advertising (electric).

Electrical Construction Co., Limited, The, London, Ont.

2281 SIGNS, Advertising (glass).

*Booth, G., & Son, Toronto, Ont.
Hobbs Mfg. Co., Limited, The, London, Ont.

2282 SIGNS, Advertising (metal).

*Booth, G., & Son, Toronto, Ont.
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Macdonald Mfg. Co., Limited, Toronto, Ont. (Adv. page 857.)
*Martel Stewart Co., Limited, The, Montreal, Que.

2283 SIGNS, Brass.

*Booth, G., & Son, Toronto, Ont.
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)
*Garth Co., The, Montreal, Que.
*Hamilton Brass Mfg. Co., Limited, The, Hamilton, Ont.
*Martel Stewart Co., Limited, The, Montreal, Que.
Mitchell, The Robt., Co., Limited, Montreal, Que.
*Montreal Stencil Works, Montreal, Que. (Adv. page 1032.)
Patterson & Heward, Toronto, Ont.
*Superior Mfg. Co., The, Toronto, Ont. (Adv. page 866.)
Toronto Brass Mfg. Co., Toronto, Ont.
Toronto Stamp & Stencil Works, Toronto, Ont.
Walker & Campbell, Montreal, Que.

2284 SIGNS, Lithographed and Embossed.

See Lithographers and Embossers.

2285 SIGNS, Wire.

*Booth, G., & Son, Toronto, Ont.
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043).
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
Manitoba Anchor Wire Fence Co., Limited, The, Winnipeg, Man.
Meadows, The Geo. B., Toronto, Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009).
Munro Wire Works, Limited, New Glasgow, N.S.

2286 SILK (dress) AND ART FABRICS, Embroidery, Knitting, Etc.

*Belding, Paul, & Co., Limited, Montreal, Que.
*Corticelli Silk Co., Limited, Montreal, Que.

2287 SILVER AND SILVER MATTE.

*Consolidated Mining & Smelting Co. of Canada, Limited, Trail, B.C. (Adv. page 1026.)
*Deloro Mining & Reduction Co., Limited, Deloro, Ont.
Granby Consolidated Mining, Smelting & Power Co., Limited, Grand Forks, B.C.

2288 SILVER, Granulated, Sterling.

*Wilkinson, The J. E., Co., Limited, Toronto, Ont.

2289 SILVER PLATE AND SILVER-PLATED GOODS.

Birks, Henry, & Sons, Limited, Montreal, Que.
*Hemming Mfg. Co., Limited, Montreal, Que. (Adv. page 1013.)
*McGlashan, Clarke Co., Limited, Niagara Falls, Ont.
*Meriden-Britannia Co., Limited, Hamilton, Ont.
Ontario Silver Co., Limited, Niagara Falls, Ont.
*Standard Silver Co., Limited, Toronto, Ont.
*Toronto Silver Plate Co., Limited, Toronto, Ont.

2290 SILVERWARE, Enamelled.

*Hemsley Mfg. Co., The, Montreal, Que.

2291 SILVERWARE, Sterling.

Birks, Henry, & Sons, Limited, Montreal, Que.
*Ellis, P. W., & Co., Limited, Toronto, Ont. (Adv. page 855.)
*Gowans, Kent & Co., Limited, Toronto, Ont.
*Hemming Mfg. Co., Limited, Montreal, Que. (Adv. page 1013.)
*McGlashan, Clarke Co., Limited, Niagara Falls, Ont.
*Roden Bros., Toronto, Ont. (Adv. page 1048.)
*Standard Silver Co., Limited, Toronto, Ont.
*Toronto Silver Plate Co., Limited, Toronto, Ont.

2292 SINGLE TREES AND DOUBLE TREES.

See Carriage Parts and Bent Goods.

2293 SINKS, Cast Iron.

*Amherst Foundry Co., Limited, Amherst, N.S. (Adv. page 849.)
*Garth Co., The, Montreal, Que.
*Gurney Foundry Co., Limited, The, Toronto, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
Plessisville, La Fonderie de, Plessisville, Que.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Toronto Foundry Co., Limited, Toronto, Ont.
Toronto Hardware Mfg. Co., Toronto, Ont.

2294 SINKS, Enamelled and Galvanized.

*Amherst Foundry Co., Limited, Amherst, N.S. (Adv. page 849.)
*Kemp Mfg. Co., Toronto, Ont.
*Standard Ideal Co., Limited, The, Port Hope, Ont. (Adv. pages 873 and 874.)

2295 SIZING, Paper.

See Glue.

2296 SKATES, Hockey and Pleasure.

*Canada Cycle & Motor Co., Limited, West Toronto, Ont. (Adv. opp. Inside Back Cover.)
*Starr Mfg. Co., Limited, Dartmouth, N.S.

2297 SKEINS, Wagon and Truck.

Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
*Gananoque Spring & Axle Co., Limited, The, Gananoque. Ont.
London Foundry Co., Limited, The, London, Ont.
*Wortman & Ward Co., Limited, The, London, Ont.

2298 SKEWERS, Bobbin.

Canada Spool & Bobbin Co., Limited, Walkerton, Ont.

2299 SKEWERS, Wood.

*Harrison, John, & Sons Co., Limited, Owen Sound. Ont.
*Irwin, R. U., & Sons, Horning's Mills, Ont.

2300 SKILLETS, Match.

Edson Fitch Co., The, Etchemin Bridge, Que.

2301 SKIPS, Ore and Water.

Beatty, M., & Sons, Limited, Welland. Ont. (Adv. page 864.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.

2302 SKIRTS, Dress.

*Allen Mfg. Co., Limited, Toronto, Ont.
Boas-Felsen Co., The, Montreal, Que.
Britannia Mfg. Co., Limited, Halifax, N.S.
Canada Cloak Co., Toronto, Ont.
Consolidated Cloak Co., Limited, The, Toronto, Ont.
Continental Costume Co., Limited, The, Toronto, Ont.
Dupuis Freres, Limited, Montreal, Que.
*Empire Mfg. Co., Limited, The, Montreal, Que.
*Gale Mfg. Co., Toronto, Ont.
*Hart Mfg. Co., The, Montreal, Que.
Helena Costume Co., Limited, London, Ont.
Ideal Women's Wear, Limited, Toronto, Ont.
Livingston & Scott, West Toronto, Ont.
McElroy Mfg. Co., Limited, The, Toronto, Ont.
McKinnon, S. F., & Co., Limited, Toronto, Ont.
Minerva Mfg. Co., Limited, The, Toronto, Ont.
Northway, John, & Son, Limited, Toronto, Ont.
Novi-Modi Costume Co., Limited, Toronto, Ont.
Rideau Mfg. Co., The, Ottawa, Ont.
Ross, The C., Co., Limited, Ottawa, Ont.
Simpson, The Robert, Co., Limited, Toronto, Ont.
*Standard Shirt Mfg. Co., Limited, The, Montreal, Que.
*Stewart, Howe & Meek Co., Limited, Toronto, Ont.
Sommer, A., & Co., Montreal, Que.
Victor Mfg. Co., The, Quebec, Que.
Waldman, J. H., & Co., Montreal, Que.

2303 SKIS.

*Dean, Walter, Toronto, Ont.

2304 SKIVERS.

*Clarke & Clarke, Limited, Toronto, Ont. (Adv. page 868.)
*Galibert, F., Montreal, Que.

2305 SKYLIGHTS, Fireproof.

Galt Art Metal Co., Limited, Galt, Ont. (Adv. page 1034.)
Irwin, Thos., & Sons, Hamilton, Ont.
Matthews, A., Toronto, Ont.
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995.)
*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.
*Riddell, John E., Hamilton, Ont.
Stevely, Wm., & Son, London, Ont.
Wheeler & Bain, Toronto, Ont.
Winnipeg Ceiling & Roofing Co., Winnipeg, Man.

2306 SLAG, Blast Furnace.

Doolittle & Wilcox, Limited, Dundas, Ont.
*Londonderry Iron & Mining Co., Limited, Londonderry, N.S.

2307 SLEDGES.

Fowler, The Josiah, Co., Limited, St. John, N.B.
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Warnock, James, Co., Limited, Galt, Ont.
*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

2308 SLEIGHS, Children's.

Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)
Gignac, J. H., Limited, Quebec, Que.
Shantz, P. E., Preston, Ont.
*Taylor, Scott & Co., Toronto, Ont.

2309 SLEIGHS, Farm and Logging.

Adams Wagon Co., Limited, Brantford, Ont.
*Bain Wagon Co., Limited, The, Woodstock, Ont.
Chatham Wagon Co., Limited, The, Chatham, Ont.
Heard, John, & Co., St. Thomas, Ont.
*Jackson Wagon Co., Limited, St. George, Ont.
*Jennings, A., & Co., Montreal, Que.
*Mount Forest Carriage Co., Limited, The, Mount Forest, Ont.
*Munro & McIntosh Carriage Co., Limited, The, Alexandria, Ont.
*Petrolia Wagon Co., Limited, Petrolia, Ont.
Speight Wagon Co., Limited, The, Markham, Ont.
Smith Bros., Toronto, Ont.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.
West Lorne Wagon Co., Limited, West Lorne, Ont.
Whitaker, Wm., & Sons, Oakville, Ont.
*Wilkinson Plow Co., Toronto, Ont.
Woodstock Wagon & Mfg. Co., Limited, The, Woodstock, Ont.

2310 SLEIGHS, Light Delivery or Passenger.

Berard & Major, Montreal, Que.
*Borland Carriage Co., Limited, The, Stratford. Ont.
Boyce Carriage Co, The, Winnipeg, Man.
*Brantford Carriage Co., Limited, The, Brantford, Ont.
Brown, S., Toronto, Ont.
Granby Carriage Co., The, Granby, Que.
Heard, John, & Co., St. Thomas, Ont.
*Heney, E. N., Co., Limited, Montreal, Que.
*Jennings, A., & Co., Montreal, Que.
Lariviere, The A. C., Co., Montreal, Que.
Ledoux Carriage Co., Limited, The, Montreal, Que.
McKie, The R., Buggy Co., Plattsville, Ont.
*McLaughlin Carriage Co., Limited, Oshawa, Ont.
*Mount Forest Carriage Co., Limited, The, Mount Forest, Ont.
*Munro & McIntosh Carriage Co., Limited, The, Alexandria, Ont.
*Tudhope Carriage Co., Limited, The, Orillia, Ont.
Whitaker, Wm., & Sons, Oakville, Ont.

2311 SLIPPERS, Knitted.

Monarch Knitting Co., Limited, Dunnville, Ont.

2312 SLIPPERS, Leather.

See Boots and Shoes, Leather.

2313 SLOTTERS.

*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)

2314 SMOKE STACKS.

See Stacks, Smoke.

2315 SNATHS, Scythe.

*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852.)
*Canada Axe & Harvest Tool Mfg. Co., Limited, St. Paul, Que.
*Dominion Snath Co., The, Waterville, Que.
*Skinner Co., Limited, The, Gananoque, Ont.

2316 SNOW SHOES.
See Shoes, Snow.

2317 SNUFF.
Rattray, J., & Co., Limited, Montreal, Que.

2318 SOAP, Coach and Car Cleaning.
*Dominion Oil Co., Limited, Hamilton, Ont.
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)

2319 SOAP, Harness.
*Dominion Oil Co., Limited, Hamilton, Ont.
*International Stock Food Co., Toronto, Ont.

2320 SOAP, Laundry.
*"Albert Soaps," Limited, Montreal, Que.
*Atlantic Soap Co., Limited, Toronto, Ont.
Barsalou, J., & Cie., Limitee, Montreal, Que.
Canadian Oil Co., Limited, Toronto, Ont.
*Carritte, de B., St. John, N.B.
Dalton Bros., Toronto, Ont.
Darling & Brady, Montreal, Que.
*Dominion Oil Co., Limited, Hamilton, Ont.
*Fairbank, The N. K., Co., Montreal, Que.
Lever Bros., Limited, Toronto, Ont.
*McColl Bros., & Co., Toronto, Ont.
Morton, David, & Sons, Limited, Toronto, Ont.
*Pendray, W. J., Victoria, B.C.
Pugsley, Dingman & Co., Limited, Toronto, Ont.
Richards Pure Soap Co., Limited, The, Woodstock, Ont.
*Royal Crown, Limited, The, Winnipeg, Man.
*Royal Soap Co., Limited, The, Vancouver, B.C.
*St. Croix Soap Mfg. Co., The, St. Stephen, N.B.
Standard Soap Co., Limited, Calgary, Alta.
*Taylor, John, & Co., Toronto, Ont.

2321 SOAP, Medicinal.
*Pendray, W. J., Victoria, B.C.
Richards Pure Soap Co., Limited, The, Woodstock, Ont.

2322 SOAP, Soft Oil.
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
*McColl Bros., & Co., Toronto, Ont.

2323 SOAP, Soft and Oil.
*Atlantic Soap Co., Limited, Toronto, Ont.

2324 SOAP, Scouring, Polishing and Fulling.
*"Albert Soaps," Limited, Montreal, Que.
*Atlantic Soap Co., Limited, Toronto, Ont.
Darling & Brady, Montreal, Que.
*Dominion Oil Co., Limited, Hamilton, Ont.
*Lawrason, S. F., & Co., London, Ont.
*McColl Bros. & Co., Toronto, Ont.
Morton, David, & Sons, Limited, Toronto, Ont.
Richards Pure Soap Co., Limited, The, Woodstock, Ont.
*Royal Crown, Limited, The, Winnipeg, Man.
*Taylor, John, & Co., Toronto, Ont.

2325 SOAP, Toilet.
*"Albert Soaps," Limited, Montreal, Que.
*Atlantic Soap Co., Limited, Toronto, Ont.
*Dominion Oil Co., Limited, Hamilton, Ont.
*Fairbank, The N. K., Co., Montreal, Que.
*Lever Bros., Limited, Toronto, Ont.
Morton, David, & Sons, Limited, Toronto, Ont.
*Pendray, W. J., Victoria, B.C.
Richards Pure Soap Co., Limited, The, Woodstock, Ont.
*Royal Crown, Limited, The, Winnipeg, Man.
*Royal Soap Co., Limited, The, Vancouver, B.C.
*Seely Mfg. Co., Windsor, Ont.
Standard Soap Co., Limited, Calgary, Alta.
*Taylor, John, & Co., Toronto, Ont.

2326 SOAP DISHES AND SPONGE HOLDERS.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2327 SOAP STONE.
Hamilton Facing Mill Co., Limited, Hamilton, Ont.

2328 SOCKETS, Electric Lamp.
*Munderloh & Co., Montreal, Que.
*Pringle, The R. E. T., Co., Limited, Montreal, Que.

2329 SOCKETS, Peavy Pole.
*McFarlane-Neill Mfg. Co., Limited, The, St. Mary's, N.B.
*Pink, Thomas, Pembroke, Ont.

2330 SOCKETS, Whip.
*McKinnon Dash & Metal Works Co., Limited, St. Catharines, Ont. (Adv. page 826.)
Smart, The James, Mfg. Co., Limited Brockville, Ont. (Adv. page 1020.)
Taylor-Forbes Co., Limited, Guelph, Ont.

2331 SOCKS, Knit (Men's).
See Hosiery.

2332 SOCKS, Lumbermen's.
Beaumont, Joseph, Glen Williams, Ont.
Goderich Knitting Co., Limited, The, Goderich, Ont.
*Hudson Bay Knitting Co., The, Montreal, Que.
Penmans, Limited, Paris, Ont. (Adv. page 1063.)
*Universal Knitting Co., Limited, The, Toronto, Ont.
*Woods Limited, Ottawa, Ont.

2333 Soda, Baking.
*Gillett, E. W., Co., Limited, Toronto, Ont.

2334 SODA, Caustic.
*Gillett, E. W., Co., Limited, Toronto, Ont.

2335 SODA, Sal.
Canada Chemical Mfg. Co., Limited, The, London, Ont. (Adv. page 1033.)
*Cottam Bird Seed, London, Ont.
Cowan, John, Co., Limited, Montreal, Que.
*Lawrason, S. F., & Co., London, Ont.
*Pendray, W. J., Victoria, B.C.

2336 SODA, Sulphate, Bi-Sulphate, Hypo-Sulphite and Sulphide of.
Nichols Chemical Co., of Canada, Limited, The, Montreal, Que. (Adv. page 1045.)

2337 SODA WATER AND CREAM.
Christin, J., & Co., Inc., Montreal, Que.
*Gurd, Charles, & Co., Limited, Montreal, Que.
Taylor & Pringle Co., Limited, Owen Sound, Ont.
Timmons, M., & Son, Quebec, Que.
*Tune, J., & Son, Toronto, Ont.

2338 SOLDER, Jewelers', Dentists' and Brazing.
*Lees, Geo. H., & Co., Limited, Hamilton, Ont.
*Wilkinson, The J. E., Co., Limited, Toronto, Ont.

2339 SOLDER, Metal (Wire, Cable or Bar).
*Acme Can Works, Montreal, Que.
Canada Metal Co., Limited, The, Toronto, Ont. (Adv. page 869.)
*Cuthbert, W. R., & Co., Montreal, Que.
*Frankel Bros., Toronto, Ont.
Kemp Mfg. Co., Toronto, Ont.
Lumen Bearing Co., West Toronto, Ont. (Adv. page 1031.)
Norton Mfg. Co., The, Hamilton, Ont.
Robertson, The James, Co., Limited, Montreal, Que.
Robertson, Thomas, & Co., Limited, Montreal, Que.
Shaw & Mason, Limited, Sydney, N.S.
Somerville, Limited, Toronto, Ont. (Adv. Outside Back Cover.)
*Spooner, Alonzo W., Port Hope, Ont.
Syracuse Smelting Works, Montreal, Que.
*Tallman, J. N., & Sons, Hamilton, Ont.

2340 SOLDERING IRONS.
Kemp Mfg. Co., Toronto, Ont.

2341 SOLES AND HEELS, Boot and Shoe.
See Heels and Heel Stock; Leather, Sole.

2342 SOLES AND HEELS, Rubber.
See Heels and Soles, Rubber.

2343 SOLES, Lambs' Wool.
*Packard, L. H., & Co., Limited, Montreal, Que.

2344 SOLICITORS, Patent.
Case, Egerton R., Toronto, Ont.
Fetherstonhaugh, E. J., Montreal, Que.
Fetherstonhaugh & Co., Toronto, Ont. (Adv. page 869.)
Ridout & Maybee, Toronto, Ont.

2345 SOUPS, Preserved and Canned.
Clark, William, Montreal, Que.
Northland Mfg. Co., The, Toronto, Ont.

2346 SOUVENIR GOODS.
*Caron Bros., Montreal, Que.
*Ellis, P. W., & Co., Limited, Toronto, Ont. (Adv. page 855.)
*Hemming Mfg. Co., Limited, Montreal, Que. (Adv. page 1013.)
*Hemsley Mfg. Co., The, Montreal, Que.
*Lees, Geo. H., & Co., Limited, Hamilton, Ont.
*Roden Bros., Toronto, Ont. (Adv. page 1048.)
*Young Bros., Toronto, Ont.
*Zock, J. J., & Co., Limited, Toronto, Ont.

2347 SOWERS, Turnip.
*Maxwell, David, & Sons, St. Mary's, Ont.
*Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)

2348 SOWERS, Seed.
See Seeders and Drills, Seed.

2349 SPADES.
*Canadian Shovel & Tool Co., Limited, The, Hamilton, Ont.
*Jones, D. F., Mfg. Co., Limited, Gananoque, Ont.
Peterborough Shovel & Tool Co., Limited, The, Peterborough, Ont.

2350 SPARS, Ship and Boat.
*B. C. Mills, Timber & Trading Co., Vancouver, B.C.
*Victoria Lumber & Mfg. Co., Limited, Chemainus, B.C.

2351 SPECTACLEWARE.
*Consolidated Optical Co., Limited, Toronto, Ont.

2352 SPELTER.
Syracuse Smelting Works, Montreal, Que.

2353 SPICE, Whole and Ground.
Barbour, G. E., Co., Limited, St. John, N.B.
Blue Ribbon, Limited, Winnipeg, Man.
Codville Co., Limited, The, Winnipeg, Man.
*Dalley, The F. F., Co., of Hamilton, Limited, Hamilton, Ont.
Dalton Bros., Toronto, Ont.
Dyson Co., The, Winnipeg, Man.
Ewing, S. H., & Sons, Montreal, Que.
*Gorman, Eckert & Co., Limited, London, Ont.
*Greig, The Robert, Co., Limited, Toronto, Ont.
Lyman Bros. & Co., Limited, The, Toronto, Ont. (Adv. page 1047.)
Lyman, Sons & Co., Montreal, Que.
McLarens, Limited, Hamilton, Ont.
Mott, John P., & Co., Halifax, N.S.
*National Drug & Chemical Co., of Canada, Limited, Montreal, Que.
*Pure Gold Mfg. Co., Limited, Toronto, Ont.
Schwartz, W. H., & Sons, Halifax, N.S.
Todhunter, Mitchell & Co., Toronto, Ont.
White Star Mfg. Co., The, Winnipeg, Man.

2354 SPIDERS, Steel (Cooking).
*Amherst Foundry Co., Limited, Amherst, N.S. (Adv. page 849.)
*Gurney Foundry Co., Limited, The, Toronto, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)
*Moore, The D., Co., Limited, Hamilton, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

2355 SPIKES, Pressed.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)

2356 SPIKES, Railway and Ship.
Cowan & Britton, Gananoque, Ont.
Hamilton Steel & Iron Co., Limited, The, Hamilton, Ont. (Adv. page 1029.)
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
Nova Scotia Steel & Coal Co., Limited, New Glasgow, N.S. (Adv. page 870.)
Peck Rolling Mills, Limited, The, Montreal, Que.
*Starr Mfg. Co., Limited, Dartmouth, N.S.
Toronto Bolt & Forging Co., Limited Toronto, Ont. (Adv. page 1060.)

2357 SPINDLES, Wood.
Canada Spool & Bobbin Co., Limited, Walkerton, Ont.
Thompson & Co., Sherbrooke, Que.

2358 SPIRITS.
*Boivin, Wilson & Co., Montreal, Que.

2359 SPLINTS, Match.
Edson Fitch Co., The, Etchemin Bridge, Que.

2360 SPOKES.
Ackland, D., & Son, Limited, Winnipeg, Man.
*Chatham Bent Goods Co., Limited, The, Chatham, Ont.
Heard, John, & Co., St. Thomas, Ont.
Hore, F. W., & Son, Limited, Hamilton, Ont.
Loughead Bros., Limited, Sarnia, Ont.
McVean, O. & W., Dresden, Ont.
*Victoria Wheel Works, Galt, Ont. (Adv. page 843.)
West Lorne Wagon Co. Limited, West Lorne, Ont.
*Windsor Turned Goods Co., Limited, The, Windsor, Ont.

2361 SPOOL WOOD.
Samson, Joseph, Quebec, Que.

2362 SPOOLS, Wood.
Canada Spool & Bobbin Co., Limited, Walkerton, Ont.
*Lachute Shuttle Co., Limited, The, Lachute Mills, Que.
Thompson & Co., Sherbrooke, Que.

2363 SPOONS.
See Hollow-ware.

2364 SPOONS, Post Hole.
*Jones, D. F., Mfg. Co., Limited, Gananoque, Ont.

2365 SPORTING GOODS.
*Holland, The G. A., & Son Co., Montreal, Que.
*Wilson, The Harold A., Co., Limited, Toronto, Ont.

2366 SPORTING GOODS, Rubber.
*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)

2367 SPOUTS, Sap.
Grimm Mfg. Co., The, Montreal, Que.
Kemp Mfg. Co., Toronto, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Taylor-Forbes Co., Limited, Guelph, Ont.

2369 SPRAYERS.
Kemp Mfg. Co., Toronto, Ont.
*Spramotor Co., The, London, Ont.
*Wright, E. T., & Co., Hamilton, Ont.
*Zenner Disinfectant Co., Windsor, Ont.

2370 SPREADERS, Manure.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Gilson Mfg. Co., Limited, Guelph, Ont.
*International Harvester Co., of Canada, Limited, Hamilton, Ont. (Adv. page 848.)
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Paris Plow Co., Limited, The, Paris, Ont.
*Wilkinson Plow Co., Toronto, Ont.

2371 SPRINGS, Bed and Woven Wire.
*Alaska Feather & Down Co., Limited, The, Montreal, Que. (Adv. page 860.)
B. C. Bedding & Upholstering Co., Limited, Vancouver, B.C.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
*Gale, Geo., & Sons, Waterville, Que.
Gold Medal Furniture Mfg. Co., Limited, Toronto, Ont.
Ham & Nott Co., Limited, Brantford, Ont.
Ives, The H. R., Co., Limited, Montreal, Que.
*Morlock Bros., Guelph, Ont.
*Toronto Bedding Co., Limited, The, Toronto, Ont.

2372 SPRINGS, Bed (Steel).
Stanyon Metallic Furniture Co., Limited, Toronto, Ont.

2373 SPRINGS, Carriage, Automobile, Buggy and Wagon.
Fowler, The Josiah, Co., Limited, St. John, N.B.
*Gananoque Spring & Axle Co., Limited, The, Gananoque, Ont.
Guelph Spring & Axle Co., Limited, Guelph, Ont.

2374 SPRINGS, Flat Steel Specialties.
St. Lawrence Steel & Wire Co., Limited, Gananoque, Ont.

2375 SPRINGS, Locomotive and Railway.
*Bailey-Underwood Co., Limited, New Glasgow, N.S.
Fowler, The Josiah, Co., Limited, St. John, N.B.
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041.)

2376 SPRINGS, Rubber.
*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

2377 SPRINGS, Upholstering.
Alaska Feather & Down Co., Limited, Montreal, Que. (Adv. page 860.)
*Gale, Geo., & Sons, Waterville, Que.
Greening, The B., Wire Co., Limited, Hamilton Ont. (Adv. page 1044.)

2378 SPRINKLERS, Automatic Fire.
Bennett & Wright Co., Limited, The, Toronto, Ont.
McGuire, W. J., Limited, Toronto, Ont. (Adv. page 1039.)
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Purdy, Mansell, Limited, Toronto, Ont. (Adv. page 1038.)
Standard Automatic Fire Sprinkler Co., Limited, The, Montreal, Que. (Adv. page 1005.)
*Vogel, H. G., Co., Montreal, Que. (Adv. page 1038.)

2379 SPRINKLERS, Lawn.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

2380 SPRINKLERS, Leach, for Tanneries.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2381 SPRINKLERS, Street.
Smith Bros., Toronto, Ont.

2382 SQUARES, Art.
See Art Squares.

2383 STABLE FIXTURES.
See Fittings, Stable.

2384 STACKERS, Pneumatic (Wind).
American-Abell Engine & Thresher Co., Limited, Toronto, Ont.
Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.
*Goodison, The John, Thresher Co., Limited, Sarnia, Ont.
Macdonald Mfg. Co., Stratford, Ont.
New Hamburg Mfg. Co., Limited, New Hamburg, Ont.
Sawyer & Massey Co., Limited, Hamilton, Ont.
Waterloo Mfg. Co., Limited, Waterloo, Ont.
*White, The Geo., & Sons Co., Limited, London, Ont.

2385 STACKS, Smoke.
Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.
*Brown Machine Co., The, New Glasgow, N.S.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Inglis, The John, Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Leonard, E., & Sons, London, Ont. (Adv. page 1047.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Owen Sound Iron Works Co., Limited, The, Owen Sound, Ont.
Plessisville, La Fonderie de, Plessisville, Que.
*Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
*Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861.)
*Wilson, J. C., & Co., Glenora, Ont.

2386 STAFFS, Flag (Steel, Galvanized).
*Goold, Shapley & Muir Co., Limited, Brantford, Ont.
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)

2387 STAINS, Floor.
Langmuir, James, & Co., Limited, Toronto, Ont.
Stephens, G. F., & Co., Limited, Winnipeg, Man.

2388 STAINS, Mortar.
Manton Bros., Toronto, Ont.
Muirhead, A., Toronto, Ont.

2389 STAINS, Wood and Shingle.
Berry Bros., Limited, Walkerville, Ont.
*Brandram-Henderson, Limited, Montreal, Que. (Adv. page 840.)
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
*Dominion Tar & Chemical Co., Limited, The, Sydney, N.S.
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
Jamieson, R. C., & Co., Limited, Montreal, Que.
Langmuir, James, & Co., Limited, Toronto, Ont.
Manton Bros., Toronto, Ont.
*Martin Senour Co., Limited, The, Montreal, Que.
*Moore, Benjamin, & Co., Limited, West Toronto, Ont.
Muirhead, A., Toronto, Ont.
*Ramsay, A., & Son Co., Montreal, Que.
Robertson, The James, Co., Limited, Montreal, Que.
*Scarfe & Co., Brantford, Ont.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
Stephens, G. F., & Co., Limited, Winnipeg, Man.

2390 STAIRS, Iron.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)
McGregor & McIntyre, Limited, Toronto, Ont.
Watson, John, & Son, Montreal, Que.

2391 STAIR TREADS, Rubber.
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

2392 STAMPS, Postage and Revenue.
*American Bank Note Co., Ottawa, Ont.

2393 STAMPS, Steel, Brass, Rubber, etc.
Hamilton Stamp & Stencil Works, Limited, Hamilton, Ont.
*Montreal Stencil Works, Montreal, Que. (Adv. page 1032.)
*Patterson & Heward, Toronto, Ont.
*Superior Mfg. Co., The, Toronto, Ont. (Adv. page 866.)
Toronto Stamp & Stencil Works, Toronto, Ont.
Walker & Campbell, Montreal, Que.

2394 STAMPING, Metal.
See Metal Stamping.

2395 STANCHIONS AND WATERING BOWLS, Cattle.
*Louden Machinery Co., Guelph, Ont.
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995.)
*Richardson, C., & Co., St. Mary's, Ont. (Adv. page 1063.)

2396 STANDS AND PEDESTALS, Jardiniere.
McLagan, The George, Furniture Co., Limited, Stratford, Ont.
Meaford Mfg. Co., Limited, The, Meaford, Ont.

2397 STANDS, Boiler.
*Gurney Foundry Co., Limited, The, Toronto, Ont.
*McAvity, T., & Sons, St. John, N.B.
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Toronto Foundry Co., Limited, Toronto, Ont.
Toronto Hardware Mfg. Co., Toronto, Ont.

2399 STANDS, Tub and Wringer.
Connor, J. H., & Son, Limited, Ottawa, Ont.

2400 STANDS, Seats and Mirrors, Hall.
See Racks, Hall.

2401 STAPLES, Fence.
Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
*London Fence Machine Co., Limited, London, Ont.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
New Brunswick Fence Co., Limited, The, Moncton, N.B.
*Page Wire Fence Co., Limited, The, Walkerville, Ont.
Western Wire & Nail Co., Limited, The, London, Ont.

2402 STAPLES, Wire (Bright, Coppered and Galvanized).
Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
Graham Nail Works, The, Toronto, Ont.
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
Western Wire & Nail Co., Limited, The, London, Ont.

2403 STAPLES, Wrought.
Cowan & Britton, Gananoque, Ont.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

2404 STARCH, Corn, Culinary and Laundry.
*Canada Starch Co., Limited, Brantford, Ont.
*Edwardsburgh Starch Co., Limited, Montreal, Que.
St. Lawrence Starch Co., Limited, Port Credit, Ont.

2405 STATIONERY.
*Alexander & Cable Lithographing Co., Toronto, Ont.
*Benallack Lithographing & Printing Co., The, Montreal, Que.
Brown Bros., Limited, The, Toronto, Ont. (Adv. page 867.)
Bulman Bros., Limited, Winnipeg, Man.
Buntin, Gillies & Co., Limited, Hamilton, Ont.

*Business Systems, Limited, Toronto, Ont.
Consolidated Lithographing & Mfg. Co., Limited, Montreal, Que. (Adv. page 997.)
*Copeland-Chatterson-Crain, Limited, Toronto, Ont.
Copp, Clark Co., Limited, The, Toronto, Ont.
Davis & Henderson, Toronto, Ont.
Dawson, W. V., & Co., Montreal, Que.
Dawson, Chas. F., Limited, Montreal, Que.
*Desbarats & Co., Montreal, Que.
*Duncan Lithographing Co., Limited, The, Hamilton, Ont.
Duncan, Robert, & Co., Hamilton, Ont.
*"5 in 1" Letter Envelope Co., Limited, The, Toronto, Ont.
Fortier, Joseph, Montreal, Que.
*Gage, W. J., & Co., Limited, Toronto, Ont.
Grand & Toy, Limited, Toronto, Ont.
Granger Freres, Montreal, Que.
Griffin & Richmond Co., Limited, The, Hamilton, Ont.
*Harris Lithographing Co., The, Toronto, Ont.
Hart & Riddell, Toronto, Ont.
*Howell Lithographing Co., Hamilton, Ont.
Johnston, W. S., & Co., Toronto, Ont.
*Lawson & Jones, Limited, London, Ont.
Librairie Beauchemin, Limited, Montreal, Que.
London Printing & Lithographing Co., The, London, Ont.
Lovell, The R. J., Co., Limited, Toronto, Ont.
Miln-Bingham Printing Co., Toronto, Ont.
Morton, Phillips & Co., Montreal, Que.
*Reason, H. T., & Co., London, Ont.
*Rolph & Clark, Limited, Toronto, Ont. (Adv. page 998.)
Ryrie Bros., Limited, Toronto, Ont.
*Smith, The David, Engraving & Lithographing Co., Toronto, Ont.
Southam Printing & Litho. Co., Limited. The, London, Ont.
Taylor, T. W., Co., Limited, Winnipeg, Man.
*Warwick Bros. & Rutter, Limited, Toronto, Ont.
Wilson, The J. C., & Co., Limited, Montreal, Que.

2406 STATUARY, Marble.
McIntosh-Gullett Co., Limited, Toronto, Ont.

2407 STATUARY, Metal.
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.

2408 STATUARY, Religious.
*Blake, W. E., Toronto, Ont.

2409 STAVES, HOOPS, Etc.
Cargill, H., & Son, Cargill, Ont.
*Conger Lumber Co., Limited, The, Toronto, Ont.
Pincombe, R. M., Strathroy, Ont.
Ransford, John, Clinton, Ont.
*Scott, A. A., McGregor, Ont.
*Sutherland, Innes Co., Limited, The, Chatham, Ont. (Adv. page 856.)

2410 STEAMBOATS.
See Boats, Steamers and Yachts.

2411 STEAM SHOVELS.
See Shovels, Steam.

2412 STEARINE.
*Harris Abattoir Co., Limited, The, Toronto, Ont.
*Martin, The D. B., Co., Limited, West Toronto, Ont.

2413 STEEL, Bar and Merchant.
*Dominion Iron & Steel Co., Limited, Sydney, N.S.
Hamilton Steel & Iron Co., Limited, The, Hamilton, Ont. (Adv. page 1029.)
London Rolling Mill Co., Limited, London, Ont.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
Nova Scotia Steel & Coal Co., Limited, New Glasgow, N.S. (Adv. page 870.)
Peck Rolling Mills, Limited, The, Montreal, Que.
Rhodes, Curry & Co., Limited, Amherst, N.S.

2414 STEEL CASTINGS.
See Castings, Steel.

2415 STEEL, Cold-Drawn.
*Canadian Drawn Steel Co., Limited, The, Hamilton, Ont. (Adv. page 1028.)
*Union Drawn Steel Co., Limited, Hamilton, Ont. (Adv. page 1028.)

2416 STEEL, Machinery and Polished.
*Canadian Drawn Steel Co., Limited, The, Hamilton, Ont. (Adv. page 1028.)
*Union Drawn Steel Co., Limited, Hamilton, Ont. (Adv. page 1028.)

2417 STEEL WORK, Architectural and Structural.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Bridge Co., Limited, The, Walkerville, Ont. (Adv. page 1044.)
*Collingwood Shipbuilding Co., Limited, Collingwood, Ont.
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843.)
Galt Art Metal Co., Limited, The, Galt, Ont. (Adv. page 1034.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Lysaght, John, Limited, Montreal, Que. (Adv. Inside Back Inner Cover.)
McGregor & McIntyre, Limited, Toronto, Ont.
McNeil, W. P., & Co., New Glasgow, N.S.
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Northern Iron Works, Limited, Winnipeg, Man.
Phoenix Bridge & Iron Works, Limited, The, Montreal, Que.
Reid & Brown, Toronto, Ont.
Stratford Bridge & Iron Works Co., Stratford, Ont.
*Vancouver Engineering Works, Limited, Vancouver, B.C.
Vulcan Iron Works, Limited, The, Winnipeg, Man.
Western Iron Works, Limited, Winnipeg, Man.

2418 STEELS AND WIRES, Corset.
St. Lawrence Steel & Wire Co., Limited, Gananoque, Ont.

2419 STENCILS, Brass.
Hamilton Stamp & Stencil Works, Limited, Hamilton, Ont.
*Montreal Stencil Works, Montreal, Que. (Adv. page 1032.)
*Superior Mfg. Co., The, Toronto, Ont. (Adv. page 866.)
Toronto Stamp & Stencil Works, Toronto, Ont.
Walker & Campbell, Montreal, Que.

2420 STEREOTYPERS.
Central Press Agency, Limited, The, Toronto, Ont.
Littlejohn & Vaughan, Limited, Toronto, Ont.
Mail Job Printing Co., Limited, The, Toronto, Ont.
Methodist Book & Publishing House, Toronto, Ont. (Adv. page 1010.)
*National Electrotype & Stereotype Co., Limited, The, Toronto, Ont.
Standard Photo Engraving Co., Limited, The, Montreal, Que. (Adv. page 1043.)
*Toronto Type Foundry Co., Limited, Toronto, Ont.

2421 STICKS, Hockey.
Salyerds, E. B., Preston, Ont.
*Starr Mfg. Co., Limited, Dartmouth, N.S.
*Still, J. H., Mfg. Co., Limited, St. Thomas, Ont.

2422 STICKS, Lacrosse.
*Holland, The G. A., & Son Co., Montreal, Que.

2423 STIFFENERS AND COUNTERS, Boot and Shoe.
*Blouin, F., Quebec, Que.
*Duclos & Payan, St. Hyacinthe, Que.
*Guay, Eugene, Montreal, Que.
Richard & Co., Quebec, Que.
*Rochette, C., Quebec, Que.
Smith, Baggs & Heaven, Toronto, Ont.
*White, The Robt., Co., Limited, Montreal, Que.

2424 STILLS, Copper.
Booth Copper Co., Limited, The, Toronto, Ont.
*Coulter, Wm., & Sons, Toronto, Ont.

2425 STILLS, Water.
*Wright, E. T., & Co., Hamilton, Ont.

2426 STOCKINGS, Lumbermen's.
See Socks, Lumbermen's.

2427 STOKERS, Mechanical.
*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)
*Jones Underfeed Stoker Co., Limited, Montreal, Que.

2428 STONE BREAKERS.
See Crushers, Ore and Rock.

2429 STONE, Building.
Brodie, James, & Son, Graniteville, Que.
Doolittle & Wilcox, Limited, Dundas, Ont.
McIntosh-Gullett Co., Limited, Toronto, Ont.
*Missisquoi Marble Co., Limited, The, Montreal, Que.
*Read, H. C., Sackville, N.B.
Robertson, D., & Co., Toronto, Ont. (Adv. page 1035.)
Roman Stone Co., Limited, The, Toronto, Ont.
*Stanstead Granite Quarries Co., Limited, Beebe Plain, Que.
*Winnipeg Supply Co., Limited, Winnipeg, Man.

2430 STONE, Crushed.
Doolittle & Wilcox, Limited, Dundas, Ont.
Maloney, John, & Co., Toronto, Ont.
*Missisquoi Marble Co., Limited, The, Montreal, Que.
*Winnipeg Supply Co., Limited, The, Winnipeg, Man.

2431 STONE, Dressed.
Robertson, D., & Co., Toronto, Ont. (Adv. page 1035.)
Roman Stone Co., Limited, The, Toronto, Ont.

2432 STONES, Grind, Scythe, etc.
*Canadian Hart Wheels, Limited, Hamilton, Ont. (Adv. page 1019.)
*Gilmour Bros. & Co., Montreal, Que.
*Read, H. C., Sackville, N.B.

2433 STONES, Lithographic.
*Ault & Wiborg Co., of Canada, Limited, The, Toronto, Ont.

2434 STONE, Paving.
Brodie, James, & Son, Graniteville, Que.

2435 STONEWARE.
*Belleville Pottery Co., Belleville, Ont.
Campbell's Sons, R., Hamilton, Ont.
*Standard Contracting Co., Limited, Toronto, Ont.

2436 STOOLS, Camp.
Otterville Mfg. Co., Limited, Otterville, Ont.
Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042.)

2437 STOOLS, Office.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
*Canadian Office & School Furniture Co., Limited, The, Preston, Ont.
*Krug, The H., Furniture Co., Limited, Berlin, Ont.
Office Specialty Mfg. Co., Limited, Toronto, Ont.

2438 STOOLS, Piano and Organ.
*Doherty, W., & Co., Clinton, Ont.
*Goderich Organ Co., Limited, The, Goderich, Ont.
Heintzman & Co., Limited, Toronto, Ont.
*Karn Piano & Organ Co., Limited, Woodstock, Ont.
Otterville Mfg. Co., Limited, Otterville, Ont.
Sherlock-Manning Organ Co., The, London, Ont.
*Thomas Organ & Piano Co., Woodstock Ont.

2439 STOPPERS, Bottle.
Aluminum & Crown Stopper Co., Toronto, Ont.
Hutchinson & Peterson, Toronto, Ont.

2440 STOUT.
See Porter.

2441 STORAGE OUTFITS, Gasoline and Oil.
Bowser, S. F., & Co., Limited, Toronto, Ont.

2442 STOVES, Gas, Gasoline and Oil.
Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
*Gurney Foundry Co., Limited, The, Toronto, Ont.
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)
*Moore, The D., Co., Limited, Hamilton, Ont.
*Siche Gas Co., Limited, The, Toronto, Ont.

2443 STOVES, Heating and Cooking.
*Amherst Foundry Co., Limited, Amherst, N.S. (Adv. page 849.)
*Belanger, A., Montmagny, Que.
Bowes, Jamieson & Co., Hamilton, Ont.
Buck, The Wm., Stove Co., Limited, Brantford, Ont.
Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
*Clare Bros. & Co., Limited, Preston, Ont.
Copp, W. J., Son & Co., Fort William, Ont.
Doherty Mfg. Co., Limited, Sarnia, Ont.
Emerson & Fisher, Limited, St. John, N.B.
Farquhar Bros., Halifax, N.S.
Findlay Bros. Co., Limited, Carleton Place, Ont.
Guelph Stove Co., Limited, Guelph, Ont.
*Gurney Foundry Co., Limited, The, Toronto, Ont.
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
Hillis & Sons, Limited, Halifax, N.S.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)
McLean, Holt & Co., St. John, N.B.
McLennan, McFeely & Co., Limited, Vancouver, B.C.
Moffat Stove Co., Limited, The, Weston, Ont.
*Moore, The D., Co., Limited, Hamilton, Ont.
New Burrell-Johnson Iron Co., Limited, The, Yarmouth, N.S.
Plessisville, La Fonderie de, Plessisville, Que.

Record Foundry & Machine Co., Moncton, N.B.
Shaw & Mason, Limited, Sydney, N.S.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Stewart, The James, Mfg. Co., Limited, Woodstock, Ont.
Tilden, Gurney & Co., Limited, Winnipeg, Man.
Walker Steel Range Co., Limited, Grimsby, Ont.
Western Foundry Co., Limited, The, Wingham, Ont.
Wheeler & Bain, Toronto, Ont.
Windsor Foundry & Machine Co., Limited, Windsor, N.S.

2444 STOVES, Hot Water Heating.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2445 STOVES, Laundry, Camp and Car.

Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)
Moffat Stove Co., Limited, The, Weston, Ont.
*Moore, The D., Co., Limited, Hamilton, Ont.

2446 STOVES, Tailor.

*Gurney, Tilden Co., Limited, The, Hamilton, Ont.
*Moore, The D., Co., Limited, Hamilton, Ont.

2447 STRAIGHTENERS, Axle.

Jardine, A. B., & Co., Hespeler, Ont.

2448 STRAINERS. Brass.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2449 STRANDS, Wire.

Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
*Dominion Wire Rope Co., Limited, Montreal, Que. (Adv. page 1026.)
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)

2450 STRAPS, Deckle.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)

2451 STRAPS, Leather.

*Ackerman, B. F., Son & Co., Peterboro, Ont.
Adams Bros. Harness Mfg. Co., Limited, Toronto, Ont.
*Edwards, J. E., & Sons, Bracondale, Ont.
*General Leather Goods, Limited, Toronto, Ont.
*Great West Saddlery Co., Limited, The, Winnipeg, Man.
*Heney, E. N., Co., Limited, Montreal, Que.
*Lamontagne, Limited, Montreal, Que.

2452 STRAWBOARDS.

Ford, Jos., & Co., Portneuf Station, Que.
Miller Bros., Co., Limited, The, Montreal, Que.
Northumberland Paper & Electric Co., Limited, The, Campbellford, Ont.
Trent River Paper Co., Limited, The, Frankford, Ont.

2453 STRAWS, Paper.

*Fletcher Mfg. Co., Limited, Toronto, Ont.

2454 STRAW GOODS.

Allan, A. A., & Co., Toronto, Ont.

2455 STRETCHERS, Carpet (Wire).

St. Lawrence Steel & Wire Co., Limited, Gananoque, Ont.

2456 STRETCHERS, Curtain (Wood).

Otterville Mfg. Co., Limited, Otterville, Ont.

2457 STUDS (Brass), Shoe and Iron.

Morrow, The John, Screw, Limited, Ingersoll, Ont.

2458 SUBSTRUCTURES, Steel.

*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)

2459 SUGAR, Icing.

Codville Co., Limited, The, Winnipeg, Man.
*Dalley, The F. F., Co., of Hamilton, Limited, Hamilton, Ont.
Patrick, W. G., & Co., Toronto, Ont.

2460 SUGAR, Refined.

Acadia Sugar Refining Co., Limited, Halifax, N.S.
British Columbia Sugar Refining Co., Limited, The, Vancouver, B.C.
Canada Sugar Refining Co., Limited, The, Montreal, Que. (Adv. page 866.)
Ontario Sugar Co., Limited, The, Berlin, Ont.
St. Lawrence Sugar Refining Co., Limited, The, Montreal, Que. (Adv. page 1062.)
Sugars, Limited, Montreal, Que.
Wallaceburg Sugar Co., Limited, The, Wallaceburg, Ont.

2461 SUITS, Shirt Waist.

See Blouses and Shirtwaists.

2462 SULKIES.

Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)
*Lochrie, James, Toronto, Ont.

2463 SUPERHEATERS, Steam.

*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)

2464 SURCINGLES.

*Turner, J. J., & Sons, Peterboro, Ont.

2465 SURREYS (Vehicles).

*Armstrong, The J. B., Mfg. Co., Limited, Guelph, Ont. (Adv. page 996.)
*Brantford Carriage Co., Limited, The, Brantford, Ont.
*Canada Carriage Co., The, Brockville, Ont.
Granby Carriage Co., The, Granby, Que.
*Gray, The Wm., & Sons Co., Limited, Chatham, Ont.
Greer, A. B., London, Ont.
*Heney, E. N., Co., Limited, Montreal, Que.
*McLaughlin Carriage Co., Limited, Oshawa, Ont.
*Munro & McIntosh Carriage Co., Limited, The, Alexandria, Ont.
*Tudhope Carriage Co., Limited, The, Orillia, Ont.

2466 SUSPENDERS, Armlets, etc.

*Berlin Suspender & Button Co., Limited, The, Berlin, Ont.
Crompton Corset Co., Limited, Toronto, Ont.
Dominion Corset Co., Quebec, Que.
Hall, The James, Co., Brockville, Ont.
*Montreal Suspender & Umbrella Mfg. Co., Montreal, Que.
*Parisian Corset Mfg. Co., Limited, Quebec, Que.

2467 SWEATERS.

Almonte Knitting Co., Limited, Almonte, Ont.
Ballantyne, R. M., Limited, Stratford, Ont.
*Hewson Woollen Mills, Limited, Amherst, N.S.
*Hudson Bay Knitting Co., The, Montreal, Que.
*Knittofit Mfg. Co., The, Montreal, Que.
Monarch Knitting Co., Limited, The, Dunnville, Ont.
Penmans, Limited, Paris, Ont. (Adv. page 1063.)
Reliance Knitting Co., Limited, The, Toronto, Ont.
Simpson, Joseph, Sons, Toronto, Ont.
Turnbull, The C., Co., of Galt, Limited, Galt, Ont.
Warren Bros., St. Catharines, Ont.
*Wilson, The Harold A., Co., Limited, Toronto, Ont.

2468 SWEEPERS, Carpet.

Bissell Carpet Sweeper Co., Niagara Falls, Ont.
*Shirreff Mfg. Co., Limited, Brockville, Ont.

2469 SWINGS, Lawn.

*Cumming Mfg. Co., Limited, The, Renfrew, Ont.
Dowswell Mfg. Co., Limited, The, Hamilton, Ont.
Imperial Rattan Co., Limited, Walkerville, Ont. (Adv. page 1034.)
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)

2470 SWITCHBOARDS.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
Canadian General Electric Co., Limited, Toronto, Ont.
Canadian Machine Telephone Co., Limited, Toronto, Ont. (Adv. page 1011.)
Canadian Westinghouse Co., Limited, Hamilton, Ont.
Consolidated Electric Co., Limited, Toronto, Ont.
Electrical Construction Co., Limited, The, London, Ont.
Hill Electric Switch Co., Limited, The, Montreal, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*Northern Electric & Mfg. Co., Limited, The, Montreal, Que. (Adv. page 842.)
*Norton Telephone Mfg. Co., Limited, Toronto, Ont. (Adv. page 1022.)
*Pringle, The R. E. T., Co., Limited, Montreal, Que.

2471 SWITCHES, Electric.

Canadian General Electric Co., Limited, Toronto, Ont
Canadian Westinghouse Co., Limited, Hamilton, Ont.
Consolidated Electric Co., Limited, Toronto, Ont.
Hill Electric Switch Co., Limited, The, Montreal, Que.
*Munderloh & Co., Montreal, Que.
*Northern Electric & Mfg. Co., Limited, The Montreal, Que. (Adv. page 842.)
*Pringle, The R. E. T., Co., Limited, Montreal, Que.

2472 SWITCHES FOR RAILWAYS.

*Canadian Ramapo Iron Works, Limited, Niagara Falls, Ont. (Adv. page 1021.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041.)
Vulcan Iron Works, Limited, The, Winnipeg, Man.

2473 SWIVELS AND CONES, for Wire Ropes.

*Cumming, J. W., New Glasgow, N.S.

2474 SYPHONS.

Hutchinson & Peterson, Toronto, Ont.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2475 SYRINGES.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)

2476 SYRUP, Corn.

*Canada Starch Co., Limited, Brantford, Ont.
*Edwardsburg Starch Co., Limited, Montreal, Que.
St. Lawrence Starch Co., Limited, Port Credit, Ont.

2477 SYRUPS, Fruit.

Christin, J., & Co., Inc., Montreal, Que.
Drake, Francis, New Glasgow, N.S.
*Dunn, Wm. H., Montreal, Que.
Dyson Co., The, Winnipeg, Man.
*Gurd, Charles, & Co., Limited, Montreal, Que.
McGregor-Harris Co., Limited, Toronto, Ont.
*National Drug & Chemical Co., of Canada, Limited, Montreal, Que.
Lytle, The T. A., Co., Limited, Toronto, Ont.
*Seely Mfg. Co., Windsor, Ont.
*Smith, J. Hungerford, Co., Limited, Toronto, Ont.

2478 SYRUP, Maple.

*Davies, The Wm., Co., Limited, Toronto, Ont.
Ozo Co., Limited, The, Montreal, Que.
Quebec Preserving Co., Quebec, Que. (Adv. page 1032.)

2479 SYRUPS, Medicinal.

*Parke, Davis & Co., Walkerville, Ont.
Saunders, W. E., & Co., London, Ont.
Stearns, Frederick, & Co., Windsor, Ont.

2480 SYRUP, Sugar.

Acadia Sugar Refining Co., Limited, Halifax, N.S.
Canada Sugar Refining Co., Limited, The, Montreal, Que. (Adv. page 866.)

2481 SYSTEMS, Loose Leaf.

*Business Systems, Limited, Toronto, Ont.
*Copeland-Chatterson-Crain, Limited, Toronto, Ont.
Davis & Henderson, Toronto, Ont.
Dawson, Chas. F., Limited, Montreal, Que.
Dawson, W. V., & Co., Montreal, Que.
Duncan, Robert, & Co., Hamilton, Ont.
*Gage, W. J., & Co., Limited, Toronto, Ont.
Hart & Riddell, Toronto, Ont.
Librairie Beauchemin, Limited, Montreal, Que.
*Library Bureau of Canada, Limited, Ottawa, Ont. (Adv. page 848.)
Morton, Phillips & Co., Montreal, Que.
Taylor, T. W., Co., Limited, Winnipeg, Man.
*United Typewriter Co., Limited, Toronto, Ont. (Adv. page 1032.)

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2482 TABLES, Billiard and Pool.
Brunswick-Balke-Collender Co., The, Toronto, Ont.
Acme Supply Co., Limited, The, Toronto, Ont.
*May, Samuel & Co., Toronto, Ont. (Adv. page 1016.)

2483 TABLES, Camp and Folding.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
Otterville Mfg. Co., Limited, Otterville, Ont.
*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042.)

2484 TABLES, Communion, Study and Card.
McLagan, The George, Furniture Co., Limited, Stratford, Ont.
*Valley City Seating Co., Limited, The, Dundas, Ont. (Adv. page 1042.)

2485 TABLES, Dining-Room (Extension).
Baird Bros., Plattsville, Ont.
*Canada Furniture Manufacturers, Limited, Toronto, Ont.
*Coombe & Watson, Kincardine, Ont.
*Knechtel Furniture Co., Limited, The, Hanover, Ont.
Lippert & Co., Berlin, Ont.
*Lucknow Furniture Co., The, Lucknow, Ont.
McLagan, The George, Furniture Co., Limited, Stratford, Ont.
*Malcolm, The Andrew, Furniture Co., Iimited, Kincardine, Ont.
Meaford Mfg. Co., Limited, The, Meaford, Ont.
*National Table Co., Limited, The, Owen Sound, Ont.
*Oliver, J., & Sons, Limited, Ottawa, Ont.
*St. Lawrence Furniture Co., The, Fraserville, Que.
Stratford Chair Co., Limited, The, Stratford, Ont.
Strathroy Furniture Co., Limited, The, Strathroy, Ont.
*Windsor Furniture Co., Limited, Windsor, N.S.
World Furnishing Co., Limited, The, Orillia, Ont.

2486 TABLES, Ironing.
Taylor-Forbes Co., Limited, Guelph, Ont.

2487 TABLES, Kitchen.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
Cushing Bros., Co., Limited, Calgary, Alta.
*Knechtel Furniture Co., Limited, The, Hanover, Ont.
*Lucknow Furniture Co., The, Lucknow, Ont.
*Oliver, J., & Sons, Limited, Ottawa, Ont.
Weiler Bros., Victoria, B.C.
*Windsor Furniture Co., Limited, Windsor, N.S.

2488 TABLES, Office and Library.
*Berlin Interior Hardwood Co., Limited, The, Berlin, Ont.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
*Coombe & Watson, Kincardine, Ont.
*Globe Furniture Co., Limited, The, Walkerville, Ont. (Adv. page 865.)
*Krug, The H., Furniture Co., Limited, Berlin, Ont.
*Library Bureau of Canada, Limited, Ottawa, Ont. (Adv. page 848.)
McLagan, The George, Furniture Co., Limited, Stratford, Ont.
*National Table Co., Limited, The, Owen Sound, Ont.
Office Specialty Mfg. Co., Limited, The, Toronto, Ont.
*Preston Furniture Co., Limited, Preston, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Strathroy Furniture Co., Limited, The, Strathroy, Ont.

2489 TABLES, Parlor.
*Canada Furniture Mfrs., Limited, Toronto, Ont.
*Hibner, The D., Furniture Co., Limited, Berlin, Ont.
*Hourd & Co., Limited, London, Ont.
*Knechtel Furniture Co., Limited, The, Hanover, Ont.
Krug, The H., Furniture Co., Limited, Berlin, Ont.
McLagan, The George, Furniture Co., Limited, Stratford, Ont.
*Malcolm & Souter Furniture Co., Limited, Hamilton, Ont.
Meaford Mfg. Co., Limited, The, Meaford, Ont.
*National Table Co., Limited, The, Owen Sound, Ont.
*St. Lawrence Furniture Co., The, Fraserville, Que.

2490 TABLES, Reed and Rattan.
Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)
Imperial Rattan Co., Limited, Walkerville, Ont. (Adv. page 1034.)

2491 TABLETS, Medicinal.
Frosst, Chas. E., & Co., Montreal, Que.
*Parke, Davis & Co., Walkerville, Ont.
Saunders, W. E., & Co., London, Ont.
Stearns, Frederick & Co., Windsor, Ont.

2492 TABLETS, Memorial.
*Booth, G., & Son, Toronto, Ont.
*Patterson & Heward, Toronto, Ont.
Walker & Campbell, Montreal, Que.

2493 TACKS.
Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Greening, The B. Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
Peck Rolling Mills, Limited, The, Montreal, Que.

2494 TACKS AND NAILS, Shoe.
Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*United Shoe Machinery Co., of Canada, Montreal, Que.

2495 TAGS, Dog and Metal.
*Banfield, W. H., & Sons, Toronto, Ont. (Adv. page 1048.)
Toronto Stamp & Stencil Works, Toronto, Ont.

2496 TAGS, Shipping.
Canada Tag & Label Co., Limited, Montreal, Que.
*Carter-Crume Co., Limited, The, Toronto, Ont.
Merchants Counter Check Book Co., Limited, Toronto, Ont.
*Morton Co., Limited, The, Toronto, Ont. (Adv. page 852.)
*Reason, H. T., & Co., London, Ont.
*Southam, Limited, Montreal, Que.
Wilson, The J. C., & Co., Limited, Montreal, Que.

2497 TAGS, Tobacco.
Macdonald Mfg. Co., Limited, Toronto, Ont. (Adv. page 857.)

2498 TALKING MACHINES.
Berliner Gramophone Co., of Canada, Limited, The, Montreal, Que.

2499 TALLOW.
*Carter, E. T., & Co., Toronto, Ont.
Freeman, The W. A., Co, Limited, Hamilton, Ont.
*Harris Abattoir Co., Limited, The, Toronto, Ont.
Harris, W., & Co., Toronto, Ont.
*Lawrason, S. F., & Co., London, Ont.
Marquis, F. Canac, Quebec, Que.
*Martin, The D. B., Co., Limited, West Toronto, Ont.
Montreal Packing Co., Limited, The, Montreal, Que.
Seward, The L. B., Lubricating Co., Ottawa, Ont.

2500 TANKS, Copper Storage.
Booth Copper Co., Limited, The, Toronto, Ont.
*Coulter, Wm., & Sons, Toronto, Ont.

2501 TANKS, Expansion.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2502 TANKS, Gas.
*Commercial Acetylene Co., of N.Y., Toronto, Ont.

2503 TANKS, Sap Gathering.
Grimm Mfg. Co., The, Montreal, Que.

2504 TANKS, Steel.
*Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Collingwood Shipbuilding Co., Limited, Collingwood, Ont.
Fleming, James, St. John, N.B.
*Goold, Shapley & Muir Co., Limited, Brantford, Ont.
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
Inglis, The John Co., Limited, Toronto, Ont. (Adv. page 1064.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Leonard, E., & Sons, London, Ont. (Adv. page 1047.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Manitoba Iron Works, Limited, The, Winnipeg, Man.
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)
*Owen Sound Iron Works Co., Limited, The, Owen Sound, Ont.
Plessisville, La Fonderie de, Plessisville, Que.
Standard Automatic Fire Sprinkler Co., Limited, The, Montreal, Que. (Adv. page 1005.)
Wheeler & Bain, Toronto, Ont.
Woodstock Wind-Motor Co., Limited, Woodstock, Ont.

2505 TANKS, Storage (Oil).
Bowser, S. F., & Co., Limited, Toronto, Ont.
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Emerson & Fisher, Limited, St. John, N.B.
Grimm Mfg. Co., The, Montreal, Que.
Marsh & Henthorn, Belleville, Ont.

2506 TANKS, Water Closet.
*Cuthbert, W. R., & Co., Montreal, Que.
*Goderich Organ Co., Limited, The, Goderich, Ont.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Toronto Hardware Mfg. Co,, Toronto, Ont.
*Windsor Furniture Co., Limited, Windsor, N.S.

2507 TANKS, Portable.
American-Abell Engine & Thresher Co., Limited, Toronto, Ont.

2508 TANKS, Wood.
Anglin, S. & Co., Kingston Ont.
Butcher, F. E., St. Mary's, Ont.
Kerr, J. & J., Co., Limited, Petrolia, Ont.
*Ontario Wind Engine & Pump Co., Limited, Toronto (Adv. page 1038.)

2509 TANNERS' SUPPLIES.
Atteaux Dyestuff & Chemical Co., Limited, Toronto, Ont.
*Carter, E. T., & Co., Toronto, Ont.

2510 TAPS, Creamer.
Kemp Mfg. Co., Toronto, Ont.

2511 TAPS (Thread-cutting, Pipe, etc.), and Dies.
*Armstrong, Mervin, Toronto, Ont.
*Banfield, W. H., & Sons, Toronto, Ont. (Adv. page 1048.)
Jardine, A. B., & Co., Hespeler, Ont.
*Pratt & Whitney Co., of Canada, Limited, Dundas, Ont. (Adv. page 828.)

2512 TAPE, Adhesive.
*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)

2513 TAPE, Electrical.
*Standard Paint Co., of Canada, Limited, The, Montreal, Que.

2514 TAPES, Cotton.
Cascade Narrow Fabric Co., Coaticook, Que.

2515 TAPES, Silk.
Cascade Narrow Fabric Co., Coaticook, Que.
*Corticelli Silk Co., Limited, Montreal, Que.

2516 TAPESTRIES.
Guelph Carpet Mills Co., Limited, The, Guelph, Ont.

2517 TAR (Coal), and Coal Tar Products.
*Carritte, de B., St. John, N.B.
*Dominion Paper Co., Montreal, Que.
*Dominion Tar & Chemical Co., Limited, The, Sydney, N.S.
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
Lockerby & McComb, Montreal, Que. (Adv. page 1047.)
*McArthur, Alex., & Co., Limited, Montreal, Que. (Adv. page 1040.)
Paterson Mfg. Co., Limited, The, Toronto, Ont.

2518 TARPAULINS.
*Bromley & Hague, Limited, Winnipeg, Man.
Edmonton Tent & Mattress Co., Limited, Edmonton, Alta.
*Hague, Armington & Co., Limited, Winnipeg, Man.
Imperial Cotton Co., Limited, Hamilton, Ont.
*Montreal Tent, Awning & Tarpaulin Co., Montreal, Que.
*Sonne, Thos., Sr., Montreal, Que.
*Tower Canadian Oiled Clothing Co., Limited, Toronto, Ont.
*Turner, J. J., & Sons, Limited, Peterborough, Ont.
*Turner, Beeton, & Co., Limited, Victoria, B.C.
*Woods, Limited, Ottawa, Ont.

2519 TEA MERCHANTS.
Blue Ribbon, Limited, Winnipeg, Man.
Codville Co., Limited, The, Winnipeg, Man.
*Davies, The Wm., Co., Limited, Toronto, Ont.
*de Forest, Harry W., St. John, N.B.
*Estabrooks T. H., St. John, N.B.
Ewing, S. H., & Sons, Montreal, Que.

2520 TEDDERS.
*Frost & Wood Co., Limited, The, Smith's Falls, Ont.
*Massey-Harris Co., Limited, Toronto Ont. (Adv. page 841.)
*Maxwell, David, & Sons, St. Mary's, Ont.

2521 TEETH, Dredge Bucket.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

2522 TEETH, Harrow and Rake.
*Bailey-Underwood Co., Limited, New Glasgow, N.S.
*Belanger, A., Montmagny, Que.
London Rolling Mill Co., Limited, London, Ont.

2523 TEETH, Thresher.
*McFarlane-Neill Mfg. Co., Limited, St. Mary's, N.B.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)
*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

2524 TELEGRAPH SIGNAL APPARATUS, Ship.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2525 TELEPHONES.
Canadian Machine Telephone Co., Limited, Toronto, Ont. (Adv. page 1011.)
Jones & Moore Electric Co., Limited, Toronto, Ont.
*Northern Electric & Mfg. Co., Limited, The, Montreal, Que. (Adv. page 842.)
*Norton Telephone Mfg. Co., Limited, Toronto, Ont. (Adv. page 1022.)
*Starr, John, Son & Co., Limited, Halifax, N.S.

2526 TELESCOPES AND SUIT CASES.
*Christie Bros., & Co., Limited, Amherst, N.S. (Adv. page 1057.)
*Eveleigh, J., & Co., Limited, Montreal, Que.
Kellys Limited, Halifax, N.S.
*Langmuir, The M., Manufacturing Co., Limited, Toronto, Ont. (Adv. page 1056.)
*McBrine, The L., Co., Limited, Berlin, Ont.
McLeod, Hawthorne Co., Limited, Montreal, Que.

2527 TENTS.
See Awnings and Tents.

2528 TERRA ALBA.
*Albert Mfg. Co., Hillsborough, N.B.

2529 TERRA COTTA.
Montreal Terra Cotta Lumber Co., The, Montreal, Que.
Toronto Pressed Brick & Terra Cotta Works, Milton, Ont.

2530 THERMOMETERS, Bakers', Steam and Hot Water.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2531 THIMBLES, Stove Pipe.
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Kemp Manufacturing Co., Toronto, Ont.
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994 and 995.)
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

2532 THREAD, Silk.
*Belding, Paul, & Co., Limited, Montreal, Que.
*Corticelli Silk Co., Limited, Montreal, Que.

2533 THRESHING MACHINES.
See Machines, Threshing.

2534 TICKETS, Railway.
International Railway Publishing Co., Limited, Montreal, Que.
*Modern Printing Co., The, Montreal, Que.
*Southam, Limited, Montreal, Que.

2535 TICKINGS.
See Cottons.

2536 TIES, Bale, Wire.
Dominion Wire Manufacturing Co., Limited, Montreal, Que. (Adv. page 847.)
Laidlaw Bale Tie Co., The, Hamilton, Ont.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)

2537 TIES, Ladies'.
See Neckwear, Ladies'.

2538 TIES, Railway.
*Burrill Lumber Co., The, Shawinigan Falls, Que.
*Carew, John, Lindsay, Ont.
Columbia River Lumber Co., Limited, Golden, B.C.
DeCew, T. H., & Son, Bruce Mines, Ont.
*Gillies Bros., Limited, Braeside, Ont.
*Grier, G. A., & Son, Montreal, Que.
East Kootenay Lumber Co., Limited, Cranbrook, B.C.
*Harrison, John, & Sons Co., Limited, Owen Sound, Ont.
*Keenan Bros., Limited, Owen Sound, Ont.
*Metis Lumber Co., The, Price, Que.
Mineral Range Iron Mining Co., Limited, The, Bessemer, Ont.
Pearce Co., Limited, The, Marmora, Ont.
Rat Portage Lumber Co., Limited, The, Kenora, Ont.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
Shawinigan Lake Lumber Co., Limited, The, Victoria, B.C.
*Shives Lumber Co., Limited, Campbellton, N.B.
Trenholme, T. A., Montreal, Que.

2539 TILES, Glass Wall.
Luxfer Prism Co., Limited, Toronto, Ont.

2540 TILES, Mantel, Flooring, and Roofing.
*Bechtels, Limited, Waterloo, Ont.
Haileybury Brick & Tile Co., Limited, Haileybury, Ont.
Hooper's Marble & Granite Co., Limited, Winnipeg, Man.
Montreal Terra Cotta Lumber Co., The, Montreal, Que.
*Reid, Robert, Montreal, Que.
Toronto Pressed Brick & Terra Cotta Works, Milton, Ont.

2541 TILES, Metal.
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994 and 995.)
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.

2542 TILES, Wall Furring and Lining, Column and Girder Covering.
Montreal Terra Cotta Lumber Co., The, Montreal, Que.

2543 TILING, Rubber, Interlocking.
*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

2544 TILLS, Alarm.
*Gurney Scale Co., The, Hamilton, Ont.

2545 TIMBER, Dimension.
See Lumber.

2546 TIN, Chloride and Bi-Chloride of.
Cowan, John, Co., Limited, Montreal, Que.
Nichols Chemical Co., of Canada, Limited, The, Montreal, Que. (Adv. page 1045.)

2547 TIN, Pig and Phosphor.
*Frankel Bros., Toronto, Ont.
Syracuse Smelting Works, Montreal, Que.
*Tallman, J. N., & Sons, Hamilton, Ont.

2548 TIN FOIL.
Freyseng Cork Co., Limited, Toronto, Ont.

2549 TINS.
See Cans.

2550 TINS, Butter.
Aubry, A., & Fils, Montreal, Que.

2551 TINWARE, Plain, Retinned, Stamped, Japanned, Lithographed.
Aubry, A., & Fils, Montreal, Que.
*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Emerson & Fisher, Limited, St. John, N.B.
Farquhar Bros., Halifax, N.S.
*Kemp Mfg. & Metal Co., Limited, The, Winnipeg, Man.
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)
Macdonald Mfg. Co., Limited, Toronto, Ont. (Adv. page 857.)
Shaw & Mason, Limited, Sydney, N.S.
*Wright, E. T., & Co., Hamilton, Ont.

2552 TIPPLES, Coal.
*Brown Machine Co., The, New Glasgow, N.S.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

2553 TIPS, Rubber, Crutch, Chair, etc.
*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)

2554 TIRE BENDERS AND UPSETTERS.
Canadian Buffalo Forge Co., Limited, Montreal, Que.
Jardine, A. B., & Co., Hespeler, Ont.
London Foundry Co., Limited, The, London, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

2555 TIRES, Carriage (Solid Rubber).
*Canadian Rubber Co., Limited. Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)
Durham Rubber Co., Limited, Bowmanville, Ont. (Adv. page 844.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

2556 TIRES, Carriage, Automobile and Bicycle (Pneumatic).
*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)
Durham Rubber Co., Limited, Bowmanville, Ont. (Adv. page 844.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

2557 TOBACCO, Smoking and Chewing.
*Dominion Tobacco Co., Montreal, Que.
Erie Tobacco Co., Limited, The, Windsor, Ont.
*Fortier, J. M., Limited, Montreal, Que.
McAlpin Tobacco Co., Toronto, Ont.
Macdonald, Sir W. C., Montreal, Que.
Rattray, J., & Co., Limited, Montreal, Que.
Rock City Tobacco Co., Limited, The, Quebec, Que. (Adv. page 845.)
*St. Lawrence Tobacco Co., Limited, The, St. Laurent, Que.
*Tuckett, The Geo. E., & Sons Co., Limited, Hamilton, Ont.
Walker Sons, Walkerville, Ont.

2558 TOBOGGANS.
*Dean, Walter, Toronto, Ont.
Gignac, J. H., Limited, Quebec, Que.
*Laliberte, J. B., Quebec, Que.
Paquet Co., Limited, The, Quebec, Que.
*Ross, Henry, Indian Lorette, Que.

2559 TONGS, Ice.
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)

2560 TONGS, Skidding.
*McFarlane-Neill Mfg. Co., Limited, St. Mary's, N.B.
*Pink, Thomas, Pembroke, Ont.
Warnock, The James, Co., Limited, Galt, Ont.

2561 TONGUES, Wagon and Sleigh.
Ackland, D., & Son, Limited, Winnipeg, Man.
Heard, John, & Co., St. Thomas, Ont.

2562 TOOLS, Bakers', Confectioners' and Ice Cream Makers'.
Fletcher Mfg. Co., Limited, Toronto, Ont.
Gardner, Robert, & Son, Montreal, Que. (Adv. page 1043.)

2563 TOOLS, Blacksmiths'.
Canadian Buffalo Forge Co., Limited, Montreal, Que.

2564 TOOLS, Bookbinders'.
*Miller & Richard, Toronto, Ont.
*Patterson & Heward, Toronto, Ont.

2565 TOOLS, Canners' and Tinsmiths'.
*Brown, Boggs Co., Limited, The, Hamilton, Ont.
*Letson & Burpee, Limited, Vancouver, B.C.

2566 TOOLS, Diamond.
*Prescott Emery Wheel Co., Limited, Prescott, Ont.

2567 TOOLS, Draining.
*Jones, D. F., Mfg. Co., Limited, Gananoque, Ont.
Peterborough Shovel & Tool Co., Limited, The, Peterborough, Ont.

2568 TOOLS, Edge.
*Disston, Henry, & Sons, Limited, Toronto, Ont.
Fowler, The Josiah, Co., Limited, St. John, N.B.
*Gilmour Bros., & Co., Montreal, Que.
Warnock, James, Co., Limited, Galt, Ont.
*Welland Vale Mfg. Co., Limited, The, St. Catharines, Ont. (Adv. page 1040.)

2569 TOOLS, Garden.
Peterborough Shovel & Tool Co., Limited, The, Peterborough, Ont.
*Welland Vale Mfg. Co., Limited, The, St. Catharines, Ont. (Adv. page 1040.)

2570 TOOLS, Haying.
Bedford Mfg. Co., The, Bedford, Que.
*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852.)
Tolton Bros., Limited, Guelph, Ont.

2571 TOOLS, Lumbering.
*Pink, Thomas, Pembroke, Ont.
Walters, H., & Sons, Hull, Que.
Warnock, James, Co., Limited, Galt, Ont.
*Welland Vale Mfg. Co., Limited, The, St. Catharines, Ont. (Adv. page 1040.)

2572 TOOLS, Machine.
*Bertram, The John, & Sons, Co., Limited, Dundas, Ont. (Adv. page 828.)
*London Machine Tool Co., Limited, The, Hamilton, Ont.
*McDougall, The R., Co., Limited, Galt, Ont. (Adv. page 1019.)
*MacGregor, Gourlay Co., Limited, The, Galt, Ont.

2573 TOOLS, Milling.
*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)
*Pratt & Whitney Co., of Canada, Limited, Dundas, Ont. (Adv page 828.)

2574 TOOLS, Pneumatic.
*Canadian Rand Co., Limited, Montreal, Que.
*Holden, N. J., Co., Limited, Montreal, Que.

2575 TOOLS, Sheet Metal Workers.
*Brown, Boggs Co., Limited, Hamilton, Ont.
*Mechanics Supply Co., Quebec, Que.

2576 TOOLS, Steam Fitters'.
Bennett & Wright Co., Limited, The, Toronto, Ont.
Jardine, A. B., & Co., Hespeler, Ont.
*McAvity, T., & Sons, St. John, N.B.
*Mechanics Supply Co., Quebec, Que.
*Pratt & Whitney Co., of Canada, Limited, Dundas, Ont. (Adv. page 828.)
Robertson, The James Co., Limited, Montreal, Que.

2577 TOOLS, Test.
*Sutherland Rifle Sight Co., Limited, The, New Glasgow, N.S.

2578 TOOLS, Track.
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041.)
Warnock, James, Co., Limited, Galt, Ont.

2579 TOOLS, Well-Boring.
*Oil Well Supply Co., Limited, Petrolia, Ont.

2580 TOPS, Table.
Algoma Commercial Co., Limited, The, Sault Ste. Marie, Ont. (Adv. page 1059.)

2582 TOQUES AND CAPS (Knit).
Ballantyne, R. M., Limited, Stratford, Ont.
Forbes, R., Co., Limited, Hespeler, Ont.
Goderich Knitting Co., Limited, The, Goderich, Ont.
*Knittofit Mfg. Co., The, Montreal, Que.
Reliance Knitting Co., Limited, The, Toronto, Ont.
Warren Bros., St. Catharines, Ont.

2583 TOWEL RACKS.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2584 TOWELS
*Dominion Textile Co., Limited, Montreal, Que.

2585 TOWERS, Cooling.
Canadian Buffalo Forge Co., Limited, Montreal, Que.

2586 TOWERS (Steel), Water, Signal, Windmill, Electric Light, etc.
Fleming, James, St. John, N.B.
*Goold, Shapley & Muir Co., Limited, Brantford, Ont.
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)
Standard Automatic Fire Sprinkler Co., Limited, The, Montreal, Que. (Adv. page 1005.)
Woodstock Wind-Motor Co., Limited, Woodstock, Ont.

2587 TOWERS, Water (Fire Department).
*Seagrave, W. E., Walkerville, Ont.

2588 TOYS.
Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)
Granger Freres, Montreal, Que.
*Holland, The G. A., & Son Company, Montreal, Que.
*Ross, Henry, Indian Lorette, Que.

2589 TRACKS, Barn Door.
Allith Mfg. Co., Limited, Hamilton, Ont.
London Foundry Co., Limited, The, London, Ont.
Taylor-Forbes Co., Limited, Guelph, Ont.
*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

2591 TRADE PUBLICATIONS.
Acton, The James, Publishing Co., of Toronto, Limited, Toronto, Ont.
Canadian Manufacturer Publishing Co., Limited, Toronto, Ont.
Farmer's Advocate, of Winnipeg, Limited, The, Winnipeg, Man.
Gagnier, H., Limited, Toronto, Ont.
Imperial Publishing Co., Limited, The, Halifax, N.S.
MacLean, Hugh C., Limited, Winnipeg, Man.
MacLean Publishing Co., Limited, The, Toronto, Ont. (Adv. page 1001.)
Monetary Times Printing Co., Toronto, Ont.
Trades Publishing Co., The, Montreal, Que.
Weld, The William, Co., Limited, London, Ont.

2592 TRAMWAYS.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861.)

2593 TRANSFORMERS.
Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
Canadian General Electric Co., Limited, Toronto, Ont.
Canadian Westinghouse Co., Limited, Hamilton, Ont.
*Forman, John, Montreal, Que.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*Packard Electric Co., Limited, The, St. Catharines, Ont. (Adv. page 876.)

2594 TRANSMISSION APPLIANCES.
*Chapman Double Ball Bearing Co., Limited, Toronto, Ont.
*Dodge Mfg. Co., of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
*Laurie Engine & Machine Co., Limited, Montreal, Que. (Adv. page 1044.)
Robertson Machinery Co., Limited, The, Welland, Ont.

2595 TRAPS, Basin and Sink.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2596 TRAPS, Fly.
*Wright, E. T., & Co., Hamilton, Ont.

2597 TRAPS, Game.
Oneida Community, Limited, Niagara Falls, Ont.

2598 TRAPS, Lead.
*McAvity, T., & Sons, St. John, N.B.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Robertson, The James, Co., Limited, Montreal, Que.
Somerville, Limited, Toronto, Ont. (Adv. Outside Back Cover.)

2599 TRAPS, Mouse and Rat.
Oneida Community, Limited, Niagara Falls, Ont.
*Wright, E. T., & Co., Hamilton, Ont.

2600 TRAPS, Oil.
Darling Bros., Limited, Montreal, Que.

2601 TRAPS, Steam.
Bennett & Wright Co., Limited, The, Toronto, Ont.
Canada Foundry Co., Limited, Toronto, Ont. (Adv page 993.)
Darling Bros., Limited, Montreal, Que.
*Dominion Radiator Co., Limited, The, Toronto, Ont.
*McAvity, T., & Sons, St. John, N.B.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Sheldons, Limited, Galt, Ont. (Adv. page 859.)

2603 TRAYS, Metal.
Macdonald Mfg. Co., Limited, Toronto, Ont. (Adv. page 857.)

2604 TRAYS, Paper.
Collett, E. B., Toronto, Ont.
*Coulter, The J., Co., Limited, Toronto, Ont.
Imperial Paper Box Co., Toronto, Ont.

2605 TREAD HORSE-POWERS.
See Horse-powers, Tread.

2606 TRIMMINGS, Boat.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

2607 TRIMMINGS, Carriage.
Conboy Carriage Co., Limited, The, Toronto, Ont.
*Guelph Carriage Top Co., Guelph, Ont.
*Montreal Carriage Leather Co., Limited, Montreal, Que.
*Walkerville Carriage Goods Co., Limited, The, Walkerville, Ont.

2608 TRIMMINGS, Dairy.
Aubry, A., & Fils, Montreal, Que.
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)

2609 TRIMMINGS, Dress, Military, Millinery, etc.
Dominion Cord & Tassel Co., The, Montreal, Que.
Moulton & Co., Montreal, Que.
*Peters, J. Henry, Co., Toronto, Ont.
Textile Trimmings, Co., The, Toronto, Ont.
White-Allan Co., of Toronto, Limited, The, Toronto, Ont.

2610 TRIMMINGS, Furniture (Brass).
*Hahn Brass Co., Limited, The, New Hamburg, Ont.

2611 TRIMMINGS, Furriers' and Undertakers'.
Moulton & Co., Montreal, Que.
*Peters, J. Henry, Co., Toronto, Ont.

2612 TRIMMINGS, Harness.
*Edwards, J. E., & Sons, Bracondale, Ont.
*General Leather Goods, Limited, Toronto, Ont.

2613 TRIMMINGS, Railway and Car (Brass).
Mitchell, The Robt., Co., Limited, Montreal, Que.

2614 TRIMMINGS, Stove.
Bowmanville Foundry Co., Limited, The, Bowmanville, Ont.
Walker Steel Range Co., Limited, Grimsby, Ont.

2615 TRIMMINGS, Upholstering.
Dominion Cord & Tassel Co., The, Montreal, Que.
Gold Medal Furniture Mfg. Co., Limited, Toronto, Ont.
White-Allan Co. of Toronto, Limited, The, Toronto, Ont.

2616 TROUGHS, Iron and Steel.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

2617 TROWELS, Plastering.
Smith, R. H., Co., Limited, St Catharines, Ont.

2618 TRUCKS, Bag, Factory and Warehouse.
Augustin & Daudelin, St. Hyacinthe, Que.
*Bell, B., & Son Co., Limited, St. George, Ont.
Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
Gendron Manufacturing Co., Limited, The, Toronto, Ont. (Adv. page 853.)
*Gurney Scale Co., The, Hamilton, Ont.
*Jennings, A., & Co., Montreal, Quebec
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
London Foundry Co., Limited, The, London, Ont.
*Meaford Wheelbarrow Co., Limited, The, Meaford, Ont. (Adv. page 1040.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Mussens, Limited, Montreal, Que.
Shantz, P. E., Preston, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
*Toronto Pressed Steel Co., Limited, The, Toronto, Ont.
Verity Plow Co., Limited, The, Brantford, Ontario. (Adv. page 854.)
*Watson, John, Mfg. Co., Limited, Ayr, Ont.
*Wilkinson Plow Co., Toronto, Ont.

2619 TRUCKS, Brick, Tile and Lumber.
*Bechtels, Limited, Waterloo, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

2620 TRUCKS, Canning Factory.
*Letson & Burpee, Limited, Vancouver, B.C.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.

2621 TRUCKS, Electric Car and Locomotive.
Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041.)

2622 TRUCKS, Farm, Freight, Log and Lumber.
Adams Wagon Co., Limited, Brantford, Ont.

*Bain Wagon Co., Limited, The, Woodstock, Ont.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Jennings, A., & Co., Montreal, Que.
*Petrolia Wagon Co., Limited, Petrolia, Ont.
West Lorne Wagon Co., Limited, West Lorne, Ont.
Woodstock Wagon & Mfg. Co., Limited, The, Woodstock, Ont.

2623 TRUCKS, Hook and Ladder.

*Seagrave, W. E., Walkerville, Ont.
Smith Bros., Toronto, Ont

2624 TRUCKS, Motor.

*Canada Cycle & Motor Co., Limited, West Toronto, Ont. (Adv. opp. Inside Back Cover.)

2625 TRUCKS, Steamboat, Dock and Railway.

*Bell, B., & Son, Co., Limited, St. George, Ont.
Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
*Jennings, A., & Co., Montreal, Que.
London Foundry Co., Limited, London, Ont.
*Meaford Wheelbarrow Co., Limited, The, Meaford, Ont. (Adv. page 1040.)
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041.)
*Mussens, Limited, Montreal, Que.
Stantz, Philip, Preston, Ont.
*Watson, John, Mfg. Co., Limited, Ottawa, Ont.
West Lorne Wagon Co., Limited, West Lorne, Ont.

2626 TRUNKS.

Adams Bros. Harness Mfg. Co., Limited, Toronto, Ont.
*Christie, Brown & Co., Limited, Amherst, N.S. (Adv. page 1037.)
*Eveleigh, J., & Co., Limited, Montreal, Que.
Hill Mfg. Co., The, Quebec, Que.
*Lamontagne, Limited, Montreal, Que.
*Langmuir, The M., Manufacturing Co., Limited, Toronto, Ont. (Adv. page 1036.)
*McBrine, The, Co., Limited, Berlin, Ont.
McLeod, Hawthorne Co., Limited, Montreal, Que.
Trunk & Leather Goods Co., Toronto, Ont.

2627 TRUSSES.

Canadian Rubber Co., Limited, The, Walkerville, Ont. (Adv. page 1044.)
Fleming, James, St. John, N.B.
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
McGregor & McIntyre, Limited, Toronto, Ont.
Matheson, H. & C., Limited, New Glasgow, N.S. (Adv. page 862.)
*Pedlars, Limited, Watford, Ont.
Phoenix Bridge & Iron Works, Limited, The, Montreal, Que.

2628 TUBES, Boiler.

Canada Foundry Co., Limited, Montreal, Que. (Adv. page 993.)
*Letson & Burpee, Limited, Vancouver, B.C.

2629 TUBES, Mailing.

Canada Paper Box Co., Limited, The, Montreal, Que.
Dominion Paper Box Co., Limited, Toronto, Ont.
Elliott Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 863.)

2658 UMBRELLAS.

*Allen Mfg. Co., Limited, Toronto, Ont.
Dominion Umbrella Factory, The, Montreal, Que.
Hamilton Paper Box Co., Hamilton, Ont.
*Hand, T. W., Firework Co., Limited, Hamilton, Ont.
Mace, Geo. A., & Co., Montreal, Que.
*Somerville, C. R., London, Ont.

2630 TUBES, Speaking.

Shipway Iron, Bell & Wire Mfg. Co., Limited, Toronto, Ont.
Wheeler & Bain, Toronto, Ont.

2631 TUBING, Rubber.

*Canadian Rubber Co., Limited, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

2632 TUBING, Brass and Copper.

See Pipe, Brass and Copper.

2633 TUBING, Wrought, Black and Galvanized.

See Pipe, Wrought, Black and Galvanized.

2634 TUBS, Bath.

*Amherst Foundry Co., Limited, Amherst, N.S. (Adv. page 849.)
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
*Standard Ideal Co., Limited, The, Port Hope, Ont. (Adv. pages 873 and 874.)

2635 TUBS, Cedar, Ice Cream.

Fletcher Mfg. Co., Limited, Toronto, Ont.

2636 TUBS, Fibre.

Eddy, The E. B., Co., Limited, Hull, Que.

2637 TUBS, Hoisting.

Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864.)

2638 TUBS, Laundry, Stone.

*Standard Contracting Co., Limited, Toronto, Ont.

2639 TUBS, Stave (Butter, Wash, etc).

Clark Bros., Sutton, Que.
Eddy, The E. B., Co., Limited, Hull, Que.
Keenan Woodenware Mfg. Co., Limited, Owen Sound, Ont.
*Thomas Bros., Limited, St. Thomas, Ont.
United Factories, Limited, Toronto, Ont. (Adv. page 1023.)

2640 TUBS, Wash (Galvanized).

Rubbo, Caesar, Montreal, Que.
Sterling Mfg. Co., Toronto, Ont.

2641 TURBINES.

Diamond Flint Glass Co., Limited, Montreal, Que.
Sydenham Glass Co., of Wallaceburg, Limited, The, Wallaceburg, Ont.

2642 TURBINES, Steam.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
Canadian General Electric Co., Limited, Toronto, Ont.
Canadian Westinghouse Co., Limited, Hamilton, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
*Hahn Brass Co., Limited, The, New Hamburg, Ont.

2643 TURBINES, Water.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.

2644 TURNBUCKLES.

*Canadian Billings & Spencer, Limited, Welland, Ont. (Adv. page 1031.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Montreal Steel Works, Limited, Montreal, Que. (Adv. page 1041.)
*Starr Mfg. Co., Limited, Dartmouth, N.S.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

2645 TURNED GOODS (Wood).

Ackland, D., & Son, Limited, Winnipeg, Man.
Aitchison, D., & Co., Hamilton, Ont.
Boake Mfg. Co., Limited, The, Toronto, Ont.
*B. C. Mills, Timber & Trading Co., Vancouver, B.C.
*Cameron, Dunn Mfg. Co., The, Strathroy, Ont. (Adv. page 852.)
Canada Spool & Bobbin Co., Limited, Walkerton, Ont.
*Chatham Bent Goods Co., Limited, The, Chatham, Ont.
Clark, W. H., & Co., Limited, Edmonton, Alta.
Crown Lumber Co., Limited, The, Woodstock, Ont.
Cushing Bros. Co., Limited, Calgary, Alta.
Davidson, James, Ottawa, Ont.
Eaton, J. R., Orillia, Ont.
Georgian Bay Shook Mills, Limited, Midland, Ont.
Gignac, J. H., Limited, Quebec, Que.
Grant, John J., New Glasgow, N.S.
Hanbury Mfg. Co., The, Brandon, Man.
Heaps, E. H., & Co., Vancouver, B.C. (Adv. page 850.)
Itzweire & Sarrasin, Montreal, Que.
Kerr, J. & J., Co., Limited, Petrolia, Ont.
Knight Bros. Co., Limited, Burk's Falls, Ont.
*Lachute Shuttle Co., Limited, Lachute Mills, Que.
*Lemon, Gonnason & Co., Victoria, B.C.
Loughead Bros., Limited, Sarnia, Ont.
Murray, G. W., Co., Limited, Winnipeg, Man.
Otterville Mfg. Co., Limited, Otterville, Ont.
Pacific Coast Lumber Mills, Limited, Vancouver, B.C.
Pauze, The U., & Fils Co., Montreal, Que.
*Pigeon River Lumber Co., Port Arthur, Ont.
Porto Rico Lumber Co., Limited, Nelson, B.C.
Rathbun Co., The, Deseronto, Ont.
Rhodes, Curry & Co., Limited, Amherst, N.S.
*Robertson & Hackett, Vancouver, B.C.
Rutherford, The Wm., & Sons Co., Montreal, Que.
*Schultz Bros. Co., Limited, The, Brantford, Ont.
Sheppard, James, & Son, Sorel, Que.
Spanner Novelty Wood Turning Co., Toronto, Ont.
Spencer Bros. & Turner, Limited, Truro, N.S.
*Still, J. H., Mfg. Co., Limited, St. Thomas, Ont.
Tait & Co., Toronto, Ont.
Thompson & Co., Sherbrooke, Que.
Tremblay, F., & Cie, Montreal, Que.
Wilson Bros., Limited, Collingwood, Ont.

2646 TURNS, Cupboard.

Belleville Hardware Co., Limited, The, Belleville, Ont.

2647 TURNTABLES, Locomotive.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Canadian Bridge Co., Limited, The, Walkerville, Ont. (Adv. page 1044.)
Dominion Bridge Co., Limited, Montreal, Que. (Adv. page 843.)
Hamilton Bridge Works Co., Limited, The, Hamilton, Ont. (Adv. page 827.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

2648 TUYERE IRONS.

See Irons, Tuyere.

2649 TWEEDS.

See Cloth, Tweed.

2650 TWINE, Binder.

*Brantford Cordage Co., Limited, The, Brantford, Ont.
*Consumers Cordage Co., Limited, Montreal, Que.
*Farmers Binder Twine Co., Limited, The, Brantford, Ont.
Plymouth Cordage Co., Welland, Ont.

2651 TWINE, Cotton.

Cornwall & York Cotton Mills Co., Limited, St. John, N.B.
*Dominion Textile Co., Limited, Toronto, Ont.
Doon Twine & Cordage Co., Limited, The, Doon, Ont.
Hamilton Cotton Co., Hamilton, Ont. (Adv. page 870.)
Imperial Cotton Co., Limited, Hamilton, Ont.
Shurly & Derrett, Limited, Toronto, Ont. (Adv. page 845.)

2652 TWINE, Hemp, Jute and Flax.

*Consumers Cordage Co., Limited, Montreal, Que.
Doon Twine & Cordage Co., Limited, Doon, Ont.
Shurly & Derrett, Limited, Toronto, Ont. (Adv. page 845.)
*Smart Bag Co., Limited, The, Montreal, Que. (Adv. page 836.)

2653 TWINE, Tarred.

*Consumers Cordage Co., Limited, Montreal, Que.

2654 TWINE, Upholsterers', Mattress, Sail, etc.

Doon Twine & Cordage Co., Limited, The, Doon, Ont.
Imperial Cotton Co., Limited, Hamilton, Ont.

2655 TWINES, Wrapping.

Doon Twine & Cordage Co., Limited, The, Doon, Ont.
Imperial Cotton Co., Limited, Hamilton, Ont.

2656 TYPE, Printing.

*Miller & Richard, Toronto, Ont.
*Toronto Type Foundry Co., Limited, Toronto, Ont.

2657 TYPEWRITERS.

*Williams Mfg. Co., Limited, The, Montreal, Que. (Adv. page 1037.)

U

2659 UNDERSKIRTS.

Bear & Stewart Skirt Co., The, St. Stephen, N.B.
Black, John P., & Co., Limited, Montreal, Que.
Canadian Underskirt Co., Limited, The, Toronto, Ont.
*Fairbairn, Rhys D., Limited, Toronto, Ont.

Northway, John, & Son, Limited, Toronto, Ont.
Pugh Mfg. Co., The, Toronto, Ont.
*Rea, A. E., & Co., Limited, Toronto, Ont.

2660 UNDERSKIRTS, Silk.

Canadian Underskirt Co., Limited, The, Toronto, Ont.
*Fairbairn, Rhys D., Limited, Toronto, Ont.
*Rea, A. E., & Co., Limited, Toronto, Ont.
*Stewart, Howe & Meek Co., Limited, Toronto, Ont.

2661 UNDERTAKING SUPPLIES.

Elliott, James S., & Son, Prescott, Ont.
*Girard & Godin, Three Rivers, Que.
*Globe Casket Co., The, London, Ont.
*National Casket Co., Toronto, Ont.
Semmens & Evel Casket Co., Limited, The, Hamilton, Ont.
Thompson, The D. W., Co., Limited, Toronto, Ont.

2662 UNDERWEAR, Balbriggan.

*Eagle Knitting Co., Limited, The, Hamilton, Ont.
*Kingston Hosiery Co., Limited, Kingston, Ont.
Penmans Limited, Paris, Ont. (Adv. page 1063.)
Simpson, Joseph, Sons, Toronto, Ont.

2663 UNDERWEAR, Cotton.

See Whitewear Ladies' and Children's.

2664 UNDERWEAR, Flannel.

*Turner, Beeton & Co., Limited, Victoria, B.C.

2665 UNDERWEAR, Knit.

Almonte Knitting Co., Limited, Almonte, Ont.
*Eagle Knitting Co., Limited, The, Hamilton, Ont.
*Ellis Mfg. Co., Limited, Hamilton, Ont.
*Galt Knitting Co., Limited, Galt, Ont. (Adv. page 1042.)
Graham, D., Sons & Co., Inglewood, Ont.
*Hewson Woollen Mills, Limited, Amherst, N.S.
*Kingston Hosiery Co., Limited, Kingston, Ont.
*Knittofit Mfg. Co., The, Montreal, Que.
Penmans, Limited, Paris, Ont. (Adv. page 1063.)
*Perry, G. B., Knitting Co., Hamilton, Ont.
Schofield Woollen Co., Limited, The, Oshawa, Ont.
Simpson, Joseph, Sons, Toronto, Ont.
Turnbull, The C., Co. of Galt, Limited, Galt, Ont.

2666 UNDERWEAR, Knit (Cotton).

Graham, D., Sons & Co., Inglewood, Ont.

2667 UNDERWEAR, Knit (Elastic.)

*Hudson Bay Knitting Co., The Montreal, Que.
*Knittofit Mfg. Co., The, Montreal, Que.
Schofield Woollen Co., Limited, The, Oshawa, Ont.
Turnbull, The C., Co. of Galt, Limited, Galt, Ont.

2668 UNDERWEAR, Knit, Fleece-lined (Men's.)

*Galt Knitting Co., Limited, Galt, Ont. (Adv. page 1042.)
Graham, D., Sons & Co., Inglewood, Ont.
*Kingston Hosiery Co., Limited, Kingston, Ont.
Penmans, Limited, Paris, Ont. (Adv. page 1063.)
Simpson, Joseph, Sons, Toronto, Ont.

2669 UNDERWEAR, Ribbed (Ladies' and Children's.)

*Eagle Knitting Co., Limited, The, Hamilton, Ont.
*Ellis Mfg. Co., Limited, Hamilton, Ont.
*Knittofit Mfg. Co., The, Montreal, Que.
Penmans, Limited, Paris, Ont. (Adv. page 1063.)
*Perry, G. B., Knitting Co., Hamilton, Ont.
Simpson, Joseph, Sons, Toronto, Ont.
Turnbull, The C., Co. of Galt, Limited, Galt, Ont.

2670 UNDERWEAR, Silk.

*Corticelli Silk Co., Limited, Montreal, Que.
Penmans, Limited, Paris, Ont. (Adv. page 1063.)

2671 UNDERWEAR, Woollen and Worsted.

Penmans, Limited, Paris, Ont. (Adv. page 1063.)

2672 UNIFORMS.

See Clothing, Railway Employees', etc.

2673 UNIFORMS, Society and Lodge.

Mortimore & Blackeby, Toronto, Ont.

2674 UNLOADERS, Ballast.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
Beatty, M., & Sons, Limited, Welland, Ont. (Adv. page 864.)

2675 UNLOADERS, Hay and Grain.

*Wortman & Ward Co. Limited, The, London, Ont.

2676 UPHOLSTERED FURNITURE.

See Furniture, Upholstered

2677 UPHOLSTERY GOODS.

Ellis Furniture Co., Limited, Ingersoll, Ont.
Gold Medal Furniture Mfg. Co., Limited, Toronto, Ont.
Hees, Geo. H., Son & Co., Limited, Toronto, Ont.
Montreal Cotton Co., Valleyfield, Que.
Textile Trimmings Co., The, Toronto, Ont.

2678 UPPERS, Boot and Shoe.

See Leather, Boot and Shoe Upper.

2679 URINALS, Enameled Cast Iron.

*Standard Ideal Co., Limited, The, Port Hope, Ont. (Adv. pages 873-874.)

2680 URN COCKS.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2681 UTENSILS, Cooking, Enameled and Copper.

*Davidson, The Thos., Mfg. Co., Limited, Montreal, Que. (Adv. page 1031.)
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)

2682 UTENSILS, Household and Dairy (Tin and Sheet Iron.)

*Aubry, A., & Fils, Montreal, Que.
*Davidson, The Thos., Mfg. Co. Limited, Montreal, Que. (Adv. page 1031.)
Farquhar Bros., Halifax, N.S.
Kemp Mfg. Co., Toronto, Ont.
*McClary Mfg. Co., The, London, Ont. (Adv. page 1022.)
Stevely, Wm., & Co., London, Ont.

V

2683 VACCINES.

*Parke, Davis & Co., Walkerville, Ont.

2684 VALISES.

See Bags, Travelling.

2685 VALVES, Back Pressure.

Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Sheldons, Limited, Galt, Ont. (Adv. page 859.)

2686 VALVES, Gate and Globe.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
*Canadian Brass Mfg. Co., Limited, The Galt, Ont.
*Cuthbert, W. R., & Co., Montreal, Que.
Doherty Mfg. Co., Limited, Sarnia, Ont.
*Economical Gas Apparatus Construction Co., Limited, The, Toronto, Ont.
Empire Mfg. Co., Limited, The, London, Ont.
*Garth Co., The, Montreal, Que.
General Brass Works, Limited, The, Toronto, Ont.
*Kerr Engine Co., Limited, The, Walkerville, Ont. (Adv. page 1033.)
Jenkins Bros., Limited, Montreal, Que.
London Brass Works Co., Limited, The, London, Ont.
*McAvity, T., & Sons, St. John, N.B.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Mitchell, The Robert, Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Niagara Falls Machine & Foundry Co., Limited, Niagara Falls, Ont. (Adv. page 1028.)
Robertson, The James, Co., Limited, Montreal, Que.
*Whitfield, The John, Co., Toronto, Ont.

2687 VALVES, Radiator.

*Dominion Radiator Co., Limited, The, Toronto, Ont.
*Kerr Engine Co., Limited, The, Walkerville, Ont. (Adv. page 1033.)
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)

2688 VALVES, Rubber.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)
Durham Rubber Co., Limited, Bowmanville, Ont. (Adv. page 844.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

2689 VALVES, Safety and Pressure Reducing.

*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)
*Canadian Brass Mfg. Co., Limited, The, Galt, Ont.
*Chadwick Bros., Hamilton, Ont.
*Cuthbert, W. R., & Co., Montreal, Que.
Darling Bros., Limited, Montreal, Que.
Empire Mfg. Co., Limited, The, London, Ont.
*Garth Co., The, Montreal, Que.
*Hamilton Brass Mfg. Co., Limited, The, Hamilton, Ont.
Jenkins Bros., Limited, Montreal, Que.
London Brass Works Co., Limited, The, London, Ont.
*McAvity, T., & Sons, St. John, N.B.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Mitchell, The Robert, Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Niagara Falls Machine & Foundry Co., Limited, Niagara Falls, Ont. (Adv. page 1028.)
Sheldons, Limited, Galt, Ont. (Adv. page 859.)
*Whitfield, The John, Co., Toronto, Ont.

2690 VANNERS, Fruc.

Allis-Chalmers-Bullock, Limited, Montreal, Que. (Adv. page 1061.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.

2691 VARNISH.

Berry Bros., Limited, Walkerville, Ont.
*Brandram-Henderson, Limited, Montreal, Que. (Adv. page 840.)
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
Canadian Oil Co., Limited, Toronto, Ont.
Crescent Oil Co., The, Hamilton, Ont.
Domestic Specialty Co., Limited, Hamilton, Ont.
*Dominion Tar & Chemical Co., Limited, The, Sydney, N.S.
*Imperial Varnish & Color Co., Limited, The, Toronto, Ont. (Adv. page 845.)
*International Varnish Co., Limited, Toronto, Ont. (Adv page 859.)
Jamieson, R. C., & Co., Limited, Montreal, Que.
Langmuir, James, & Co., Limited, Toronto, Ont.
McArthur, Corneille & Co., Montreal, Que.
*McCaskill, Dougall & Co., Montreal, Que. (Adv. page 1047.)
*McColl Bros. & Co., Toronto, Ont.
*Martin Senour Co., Limited, The, Montreal, Que.
*Moore, Benjamin, & Co., Limited, West Toronto, Ont.
Muirhead, A., Toronto, Ont.
*Pendray, W. J., Victoria, B.C.
*Ramsay, A., & Son Co., Montreal, Que.
Robertson, The James, Co., Limited, Montreal, Que.
*Scarfe & Co., Brantford, Ont.
Sherwin-Williams Co., The, Montreal, Que.
*Standard Paint & Varnish Co., Limited, Windsor, Ont.
*Standard Paint Co., of Canada, Limited, The, Montreal, Que.
Stephens, G. F., & Co., Limited, Winnipeg, Man.

2692 VASES, Iron.

Canada Foundry Co., Limited, Toronto, Ont. (Adv. page 993.)
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)
Shantz, P. E., Preston, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
*Watson, John, Mfg. Co., Limited, Ayr, Ont.

2693 VATS, Cheese and Cream.

Anglin, S., & Co., Kingston, Ont.
Plessisville, La Fonderie de, Plessisville, Que.

*Richardson, C., & Co., St. Mary's, Ont. (Adv. page 1063.)
Stevely, Wm., & Son, London, Ont.

2694 VAULTS AND VAULT DOORS.

*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 853.)

2695 VAULT FITTINGS, Metal.

Eclipse Mfg. Co., Limited, The, Ottawa, Ont.
Office Specialty Mfg. Co., Limited, Toronto, Ont.

2696 VEGETABLES, Canned.

Bloomfield Packing Co., Limited, Bloomfield, Ont.
*Burlington Canning Co., Limited, The, Burlington, Ont.
*Canadian Canners, Limited, Hamilton, Ont.
Old Homestead Canning Co., The, Picton, Ont.
*Wethey, J. H., Limited, St. Catharines, Ont.

2697 VEGETABLES, Dried.

*Graham Co., Limited, The, Belleville, Ont.

2698 VEHICLES.

See Carriages; Cutters; Sleighs; Wagons

2699 VEHICLES IN THE WHITE.

See Carriage Bodies in the White.

2700 VEHICLES, Motor, Gasoline, and Electric.

See Automobiles.

2701 VELOCIPEDES AND TRICYCLES.

Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)

2702 VELOCIPEDES, Railway.

Bessette, La Cie, J. & S., Ltee, Iberville, Que.
Marsh & Henthorn, Belleville, Ont.

2703 VENEERS, Chair, Built-up, Brush, Etc.

Algoma Commercial Co., Limited, The, Sault Ste. Marie, Ont. (Adv. page 1059.)
*Canada Wood Specialty Co., Limited, The, Orillia, Ont.
*De Cew, T. H., & Son, Bruce Mines, Ont.
*Hay & Co., Woodstock, Ont.
*Rider & Kitchener Co., Limited, The, Lindsay, Ont.

2704 VENEERS, Cigar Box.

Beck, Adam, London, Ont.

2705 VENETIANS.

See Cloth, Venetian.

2706 VENTILATORS.

Burrow, Stewart & Milne Co., Limited, The, Hamilton, Ont. (Adv. page 1015.)
Canadian Buffalo Forge Co., Limited, Montreal, Que.
Hughes, J. W., & Son, Montreal, Que.
Luxfer Prism Co., Limited, Toronto, Ont.
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co., of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995.)
*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)
*Pease Foundry Co., Limited, Toronto, Ont.
*Pease-Waldon Co., Limited, Winnipeg, Man.
*Pedlar Metal Roofing Co., The, Oshawa, Ont.
Sheldons, Limited, Galt, Ont. (Adv. page 859.)
Toronto Furnace & Crematory Co., Limited, Toronto, Ont.
Wheeler & Bain, Toronto, Ont.

2707 VENTS, Fire Clay.

*Standard Drain Pipe Co., of St. Johns, Que., Limited, The, St. Johns, Que. (Adv. page 854.)

2708 VENTS, Radiator.

Penberthy Injector Co., Limited, Windsor, Ont. (Adv. page 865.)

2709 VERMILLION.

Brandram-Henderson, Limited, Montreal, Que. (Adv. page 840.)
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)

2710 VESTMENTS, Church.

*Blake, W. E., Toronto, Ont.

2711 VESTS.

Canada Neckwear, Limited, Toronto, Ont.
Chalcraft, W. E., Co., Limited, Toronto, Ont.
Monarch Knitting Co., Limited, The, Dunnville, Ont.
*Perry, G. B., Knitting Co., Hamilton, Ont.
Salem Co., Limited, Montreal, Que.

2712 VETERINARY PREPARATIONS.

*International Stock Food Co., Toronto, Ont.
Pratt Food Co., of Canada, Limited, Toronto, Ont.

2713 VINEGAR.

Blackwood's, Limited, The, Winnipeg, Man.
Canadian Vinegar Co., The, Montreal, Que.
Dominion Vinegar Works Co., Montreal, Que.
Drake, Francis, New Glasgow, N.S.
Dyson Co., The, Winnipeg, Man.
Imperial Vinegar & Pickling Co., of Hamilton, Limited, The, Hamilton, Ont.
*National Drug & Chemical Co., of Canada, Limited, Montreal, Que.
Ozo Co., Limited, The, Montreal, Que.
*Port Dover Evaporating Co., The, Port Dover, Ont.
St. Hyacinthe Distillery, Packing & Vinegar Co., Limited, The, St. Hyacinthe, Que.
Taylor & Pringle Co., Limited, Owen Sound, Ont.
Wilson, Lytle, Badgerow Co., Limited, The, Toronto, Ont.

2714 VISES, Bench.

*Brown, Boggs Co., Limited, The, Hamilton, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
*Stevens Co., of Galt, Limited, The, Galt, Ont. (Adv. page 1003.)

2715 VISES, Drill.

*Stevens Co., of Galt, Limited, The, Galt, Ont. (Adv. page 1003.)

2716 VISES, Horseshoers'.

Jardine, A. B., & Co., Hespeler, Ont.

2717 VISES, Saw.

Taylor-Forbes Co., Limited, Guelph, Ont.

2718 VOLTMETERS.

Canadian General Electric Co., Limited, Toronto, Ont.

W

2719 WAGONS, Ambulance and Military Transport.

*Bain Wagon Co., Limited, The, Woodstock, Ont.
Boyce Carriage Co., The, Winnipeg, Man.
Greer, A. B., London, Ont.
*Petrolia Wagon Co., Limited, Petrolia, Ont.
Smith Bros., Toronto, Ont

2720 WAGONS, Children's Express.

Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)
Woodstock Wagon & Mfg. Co., Limited, The, Woodstock, Ont.

2721 WAGONS, Delivery (Automobile.)

Boyce Carriage Co., The, Winnipeg, Man.
*Canada Cycle & Motor Co., Limited, West Toronto, Ont. (Adv. opp. Inside Back Cover.)
*Ford Motor Company of Canada, Limited, The, Walkerville, Ont. (Adv. page 829.)

2722 WAGONS, Dumping.

*Bain Wagon Co., Limited, The, Woodstock, Ont.

2723 WAGONS, Farm.

Adams Wagon Co., Limited, Brantford, Ont.
*Bain Wagon Co., Limited, The, Woodstock, Ont.
Chatham Wagon Co., Limited, The, Chatham, Ont.
Heard, John, & Co., St. Thomas, Ont.
*Jackson Wagon Co., Limited, St. George, Ont.
*Massey-Harris Co., Limited, Toronto, Ont. (Adv. page 841.)
*Petrolia Wagon Co., Limited, Petrolia, Ont.
Speight Wagon Co., Limited, The, Markham, Ont.
*Toronto Pressed Steel Co., Limited, The, Toronto, Ont.
West Lorne Wagon Co. Limited, West Lorne, Ont.
Whitaker, Wm., & Son, Oakville, Ont.
*Wilkinson Plow Co., Toronto, Ont.
Woodstock Wagon & Mfg. Co., Limited, The, Woodstock, Ont.

2724 WAGONS, Fire (Hose, Chemical, Etc.).

Boyce Carriage Co., The, Winnipeg, Man.
*Seagrave, W. E., Walkerville, Ont.
Smith Bros., Toronto, Ont.
Truro Carriage Co., Truro, N.S.

2725 WAGONS, Freight, Coal, Heavy, Express, Etc.

Adams Wagon Co., Limited, Brantford, Ont.
*Bain Wagon Co., Limited, The, Woodstock Ont.
*Meaford Wheelbarrow Co., Limited, The, Meaford, Ont. (Adv. page 1040.)
*Petrolia Wagon Co., Limited, Petrolia, Ont.
St. Lawrence Wagon Co., Limited, Montreal, Que.
Smith Bros., Toronto, Ont.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.
Whitaker, Wm., & Sons, Oakville, Ont.

2726 WAGONS, Light Delivery, Spring, Baggage, Etc.

Adams Wagon Co., Limited, Brantford, Ont.
*Bain Wagon Co., Limited, The, Woodstock, Ont.
*Borland Carriage Co., Limited, The, Stratford, Ont.
*Brantford Carriage Co., Limited, The, Brantford, Ont.
Brown, S., Toronto, Ont.
Boyce Carriage Co., The, Winnipeg, Man.
*Canada Carriage Co., The, Brockville, Ont.
*Dominion Carriage Co., Limited, West Toronto, Ont. (Adv. page 861.)
Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)
*Gray, The Wm., & Sons Co., Limited, Chatham, Ont.
*Heney, E. N., Co., Limited, Montreal, Que.
*Jennings, A., & Co., Montreal, Que.
Ledoux Carriage Co., Limited, The, Montreal, Que.
*McLaughlin Carriage Co., Limited, Oshawa, Ont.
*Mount Forest Carriage Co., Limited, The, Mount Forest, Ont.
*Munro & McIntosh Carriage Co., Limited, The, Alexandria, Ont.
Smith Bros., Toronto, Ont.
*Tudhope Carriage Co., Limited, The, Orillia, Ont.
Truro Carriage Co., Truro, N.S.
Whitaker, Wm., & Sons, Oakville, Ont.
Woodstock Wagon & Mfg. Co., Limited, The, Woodstock, Ont.

2727 WAGONS, Ore.

*Bain Wagon Co., Limited, The, Woodstock, Ont.

2728 WAGONS, Street Sprinkler.

Smith Bros., Toronto, Ont.

2729 WAISTS, Corset.

Crompton Corset Co., Limited, Toronto, Ont.
Dominion Corset Co., Quebec, Que.
*Parisian Corset Mfg. Co., Limited, Quebec, Que.

2730 WAITERS, Dumb.

*Paquet & Godbout, St. Hyacinthe, Que.
*Parkin Elevator Co., Limited, Hespeler, Ont.
Turnbull Elevator Mfg. Co., The, Toronto, Ont.
*Warden King, Limited, Montreal, Que.

2731 WALL PAPER.

See Paper, wall or hanging.

2732 WARDROBES.

Hespeler Furniture Co., Limited, The, Hespeler, Ont.
Meaford Mfg. Co., Limited, The, Meaford, Ont.
*Malcolm, Andrew, Furniture Co., Limited, Kincardine, Ont.
*Oliver, J., & Sons, Limited, Ottawa, Ont.
*St. Lawrence Furniture Co., The, Fraserville, Que.

2733 WARPS. Cotton.

*Carter, E. T., & Co., Toronto, Ont.
*Dominion Textile Co., Limited, Montreal, Que.
Hamilton Cotton Co., Hamilton, Ont. (Adv. page 870.)
Paris Wincey Mills Co., The, Paris, Ont. (Adv. page 854.)

2734 WASHBOARDS.

Eddy, The E. B., Co., Limited, Hull, Que.
*Meakins & Sons, Hamilton, Ont.
*Taylor, Scott & Co., Toronto, Ont.
*Thomas Bros., Limited, St. Thomas, Ont.
United Factories, Limited, Toronto, Ont. (Adv. page 1023.)

2735 WASHERS, Air.

Canadian Buffalo Forge Co., Limited, Montreal, Que.

2736 WASHERS, Cloth, for Woollen Mills.

*Karch, H. W., Hespeler, Ont.

2737 WASHERS, Iron, Wrought Iron, Steel, Etc.

Cowan & Britton, Gananoque, Ont.
London Rolling Mill Co., Limited, London, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Parmenter & Bulloch Co., Limited, The, Gananoque, Ont. (Adv. page 1024.)
Peck Rolling Mills, Limited, The, Montreal, Que.
*Starr Mfg. Co., Limited, Dartmouth, N.S.
Toronto Bolt & Forging Co., Limited, Toronto, Ont. (Adv. page 1060.)

2738 WASHERS, Rubber.

*Canadian Rubber Co., Limited, The, Montreal, Que. (Adv. opp. Inside Back Cover.)
*Dunlop Tire & Rubber Goods Co., Limited, Toronto, Ont. (Adv. page 1018.)
*Gutta Percha & Rubber Mfg. Co., Limited, The, Toronto, Ont. (Adv. Inside Back Inner Cover.)

2739 WASHING COMPOUNDS.

See Soda, sal.

2740 WASHSTAND TOPS, German Silver.

Mitchell, The Robt., Co., Limited, Montreal, Que.

2741 WASTE, Cotton.

Bauer, A., & Co., Waterloo, Ont.
Hamilton Engine Packing Co., Hamilton, Ont.
*Montreal Cotton & Wool Waste Co., Limited, Montreal, Que.
Piper, The Hiram L., Co., Limited, Montreal, Que.

2742 WASTE, Wool.

*Montreal Cotton & Wool Waste Co., Limited, Montreal, Que.

2743 WATCHCASES.

*American Watch Case Co., Limited, Toronto, Ont.
*Ellis, P. W., & Co., Limited, Toronto, Ont. (Adv. page 855.)
Montreal Watch Case Co., Limited, The, Montreal, Que.

2744 WATER, Aerated.

Blackwoods, Limited, The, Winnipeg, Man.
Calgary Brewing & Malting Co., Limited, Calgary, Alta.
Coca-Cola Co., The, Toronto, Ont.
Christin, J., & Co., Inc., Montreal, Que.
Drake, Francis, New Glasgow, N.S.
Drewry, Edward L., Winnipeg, Man.
*Gurd, Charles, & Co., Limited, Montreal, Que.
Jones, Simeon, Limited, St. John, N.B.
*McLaughlin, J. J., Limited, Toronto, Ont.
Timmons, M., & Son, Quebec, Que.
*Tune, J., & Son, London, Ont.

2745 WATER, Mineral.

Christin, J., & Co., Inc., Montreal, Que.
*Gurd, Charles, & Co., Limited, Montreal, Que.
*McLaughlin, J. J., Limited, Toronto, Ont.
*Ready, James, Limited, St. John, N.B.
Taylor & Pringle Co., Limited, Owen Sound, Ont.
1,000 Islands Mineral Water Co., Limited, Brockville, Ont.
Timmons, M., & Son, Quebec, Que.
*Tune, J., & Son, London, Ont.

2746 WATER SOFTENERS AND PURIFIERS.

*Babcock & Wilcox, Limited, Montreal, Que. (Adv. page 851.)
Standard Soap Co., Limited, Calgary, Alta.

2747 WATER WHEELS.

See Wheels, water, turbine.

2748 WATERS, Toilet.

*Seely Mfg. Co., Windsor, Ont.

2749 WATTMETERS.

Canadian General Electric Co., Limited, Toronto, Ont.
*Packard Electric Co., Limited, St. Catharines, Ont. (Adv. page 876.)

2750 WAX, Floor.

Commercial Oil Co., Limited, The, Hamilton, Ont.
Langmuir, James, & Co., Limited, Toronto, Ont.
Muirhead, A., Toronto, Ont.

2751 WAX, Paraffine.

Canadian Oil Co., Limited, Toronto, Ont.
Imperial Oil Co., Limited, The, Montreal, Que.
Queen City Oil Co., Limited, The, Toronto, Ont. (Adv. page 1028.)

2752 WEBBINGS.

*Canadian Silk Co., Limited, Toronto, Ont.
Cascade Narrow Fabric Co., Coaticook, Que.
Colonial Weaving Co., Limited, Peterborough, Ont.

2753 WEBS, Girth, Halter, and Blanket.

Hamilton Cotton Co., Hamilton, Ont. (Adv. page 870.)

2754 WEDGES.

*Cumming, J. W., New Glasgow, N.S.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
*Pink, Thomas, Pembroke, Ont.
Warnock, The James, Co., Limited, Galt, Ont.
*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

2755 WEEDERS.

*Cockshutt Plow Co., Limited, Brantford, Ont.
*Maxwell, David, & Sons, St. Marys, Ont.

2756 WEIGHERS, Threshing Machine.

American-Abell Engine & Thresher Co., Limited, Toronto, Ont.
Bell, The Robt., Engine & Thresher Co., Limited, Seaforth, Ont.
New Hamburg Mfg. Co., Limited, The, New Hamburg, Ont.

2757 WEIGHTS.

*Gurney Scale Co., The, Hamilton, Ont.

2758 WELTING, Shoe.

Bell, J. & T., Montreal, Que.
Sadler & Haworth, Montreal, Que. (Adv. page 1002.)

2759 WHEAT FLAKES, Meal, Etc.

See Flour, wheat.

2760 WHEELBARROWS.

Baird, H. C., Son & Co., Limited, Parkhill, Ont.
*Bell, B., & Son Co., Limited, St. George, Ont.
Connor, J. H., & Son, Limited, Ottawa, Ont.
*Cossitt Co., Limited, The, Brockville, Ont.
Fleury's Sons, J., Aurora, Ont.
Hamilton Facing Mill Co., Limited, Hamilton, Ont.
London Foundry Co., Limited, The, London, Ont.
*Maxwell, David, & Sons, St. Mary's, Ont.
*Meaford Wheelbarrow Co., Limited, The, Meaford, Ont. (Adv. page 1040.)
*Mussens, Limited, Montreal, Que.
*Paris Plow Co., Limited, The, Paris, Ont.
*Schultz Bros. Co., Limited, The, Brantford, Ont.
Shantz, P. E., Preston, Ont.
*Toronto Pressed Steel Co., Limited, The, Toronto, Ont.
*Verity Plow Co., Limited, Brantford, Ont. (Adv. page 854.)
Viles, W. F., Cowansville, Que.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.
*Wilkinson Plow Co., Toronto, Ont.

2761 WHEELBARROWS, Railway (iron.)

Bell, B., & Son Co., Limited, St. George, Ont.
London Foundry Co., Limited, The, London, Ont.
*Mussens, Limited, Montreal, Que.
*Watson, John, Mfg. Co., Limited, Ayr, Ont.
*Wilkinson Plow Co., Toronto, Ont.

2762 WHEELBARROWS, Toy.

Gendron Mfg. Co., Limited, The, Toronto, Ont. (Adv. page 853.)

2763 WHEELS, Automobile.

*Chaplin Wheel Co., Limited, The, Chatham, Ont.

2764 WHEELS, Car.

*Canada Car Co., Limited, Montreal, Que.
*Canadian Iron & Foundry Co., Limited, Montreal, Que. (Adv. page 827.)
Fleck, Alexander, Limited, Ottawa, Ont.
Lumen Bearing Co., West Toronto, Ont. (Adv. page 1031.)
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Marsh & Henthorn, Belleville, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Rhodes, Curry & Co., Limited, Amherst, N.S.

2765 WHEELS, Carriage (in the white.)

*Armstrong, The J. B., Mfg. Co., Limited, Guelph, Ont. (Adv. page 996.)
*Chaplin Wheel Co., Limited, The, Chatham, Ont.
McVean, O. & W., Dresden, Ont.
*Victoria Wheel Works, Galt, Ont. (Adv. page 843.)

2766 WHEELS, Corundum, Emery and Adamite.

*Canadian Hart Wheels, Limited, Hamilton, Ont. (Adv. page 1019.)
*Disston, Henry, & Sons, Limited, Toronto, Ont.
*Prescott Emery Wheel Co., Limited, Prescott, Ont.

2767 WHEELS, Fly and Gear.

*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)
Gardner, Robt., & Son, Montreal, Que. (Adv. page 1043.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)
Kennedy, The Wm., & Sons, Limited, Owen Sound, Ont.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
Robb Engineering Co., Limited, Amherst, N.S. (Adv. page 858.)
Waterous Engine Works Co., Limited, The, Brantford, Ont. (Adv. page 861.)

2768 WHEELS, Iron, Grooved.

*Dodge Mfg. Co. of Toronto, Limited, Toronto, Ont. (Adv. page 831.)
*Goldie & McCulloch Co., Limited, The, Galt, Ont. (Adv. page 833.)

2769 WHEELS, Propeller.

*Brown Machine Co., The, New Glasgow, N.S.
*Collingwood Shipbuilding Co., Limited, Collingwood, Ont.
Fleming, James, St. John, N.B.
Kennedy, The Wm., & Sons, Limited, Owen Sound, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. Adv. page 1041.)
*Polson Iron Works, Limited, Toronto, Ont. (Adv. page 1033.)
*St. John Iron Works, Limited, St. John, N.B.

2770 WHEELS, Ratchet and Sprocket.

*Bertram, The John, & Sons Co., Limited, Dundas, Ont. (Adv. page 828.)
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
*Long, The E., Mfg. Co., Limited, Orillia, Ont.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)

2771 WHEELS, Truck and Wagon.

*Belanger, A., Montmagny, Que.
*Bell, B., & Son Co., Limited, St. George, Ont.
*Chaplin Wheel Co., Limited, The, Chatham, Ont.
Heard, John, & Co., St. Thomas, Ont.
McVean, O. & W., Dresden, Ont.
*Victoria Wheel Works, Galt, Ont. (Adv. page 843.)
*Watson, John, Mfg. Co., Limited, Ayr, Ont.

2772 WHEELS, Water, Turbine.

Fleming, James, St. John, N.B.
Kennedy, The Wm., & Sons, Limited, Owen Sound, Ont.
McDougall, The John, Caledonian Iron Works Co., Limited, Montreal, Que. (Adv. page 1061.)
Plessisville, La Fonderie de, Plessisville, Que.
*Waterous Engine Works Co., Limited, Brantford, Ont. (Adv. page 861.)
Williams, The Madison, Mfg. Co., Limited, Lindsay, Ont.
*Wilson, J. C., & Co., Glenora, Ont.

2773 WHIFFLETREES.

Ackland, D., & Son, Limited, Winnipeg, Man.
Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852.)
*Columbia Handle & Lumber Co., The, London, Ont.
Heard, John, & Co., St. Thomas, Ont.
*Pink, Thomas, Pembroke, Ont.
*Still, J. H., Mfg. Co., Limited, St. Thomas, Ont.

2774 WHIFFLETREE TIPS.

*Skinner Co., Limited, The, Gananoque, Ont.
*Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

2775 WHIPS.

*Brown, John E., Hamilton, Ont.
*Hamilton Whip Co., Hamilton, Ont.
*Lay Whip Co., Rock Island, Que.

2776 WHISKS.

*Meakins & Sons, Hamilton, Ont.
*Nelson, H. W., & Co., Limited, Toronto, Ont. (Adv. page 1044.)
*Simms, T. S., & Co., Limited, St. John, N.B.
*Stevens-Hepner Co., Limited, Port Elgin, Ont.
*Thomas Bros., Limited, St. Thomas, Ont.
United Factories, Limited, Toronto, Ont. (Adv. page 1023.)

2777 WHISKY.

*Corby, H., Distillery Co., Limited, Corbyville, Ont.
*Gooderham & Worts, Limited, Toronto, Ont.
*Hamilton Distillery Co., Limited, The, Hamilton, Ont.
St. Hyacinthe Distillery, Packing & Vinegar Co., Limited, The, St. Hyacinthe, Que.

Walker, Hiram, & Sons, Limited, Walkerville, Ont. Adv. page 1008.)

.2778 WHISTLES, Steam.

*Garth Co., The, Montreal, Que.
*McAvity, T., & Sons, St. John, N.B.
Mitchell, The Robt., Co., Limited, Montreal, Que.
Morrison, The James, Brass Mfg. Co., Limited, Toronto, Ont. (Adv. page 1029.)
Penberthy Injector Co., Limited, Windsor, Ont. (Adv. page 865.)

2779 WHITE LEAD.

See Lead, White and Red.

2780 WHITE WASHING APPARATUS.

*Spramotor Co., The, London, Ont.

2781 WHITEWEAR, Ladies' and Children's.

*Allen Mfg. Co., Toronto, Ont.
Black, John P., & Co., Limited, Montreal, Que.
Crescent Mfg. Co., Limited, Montreal, Que.
Eaton, The T., Co., Limited, Toronto, Ont.
*Eclipse Whitewear Co., Limited, The, Toronto, Ont.
*Gale Mfg. Co., Toronto, Ont.
Ideal Women's Wear, Limited, Toronto, Ont.
Keens Mfg. Co., Toronto, Ont.
Klein Bros. & Co., Montreal. Que.
Minerva Mfg. Co., Limited, The, Toronto, Ont.
Rideau Mfg. Co., The, Ottawa, Ont.
Ross, The C. Co., Limited, Ottawa, Ont.
Salem Co., Limited, Montreal, Que.
Star Whitewear Mfg. Co., The, Berlin, Ont.
Victor Mfg. Co., The, Quebec, Que.

2782 WHOLE-CARPETS, Brussels, Smyrna, Wilton.

Canadian Axminster Co., Limited, The, Hamilton, Ont.
Guelph Carpet Mills Co., Limited, The, Guelph, Ont.
Toronto Carpet Mfg. Co., Limited, Toronto, Ont.

2783 WICK, Lamp.

Hamilton Cotton Co., Hamilton, Ont. (Adv. page 870.)

2784 WICKETS, Brass.

Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)

2785 WINCHES.

*Drolet, F. X., Quebec, Que.
*Jenckes Machine Co., Limited, The, Sherbrooke, Que.
Marsh & Henthorn, Belleville, Ont.
Miller Bros. & Toms, Montreal, Que. (Adv. page 1041.)
*Pink, Thomas, Pembroke, Ont.
Windsor Foundry & Machine Co., Limited, Windsor, N.S.

2786 WINDERS, Drum Spool (Woollen Mill.)

*Karch, H. W., Hespeler, Ont.

2787 WINDERS, Yarn.

*Creelman Bros., Georgetown, Ont.

2788 WINDLASSES.

*Drolet, F. X., Quebec, Que.
Matheson, I., & Co., Limited, New Glasgow, N.S. (Adv. page 862.)

2789 WINDMILLS, Steel and Galvanized.

*Goold, Shapley & Muir Co., Limited, Brantford, Ont.
*Ontario Wind Engine & Pump Co., Limited, Toronto, Ont. (Adv. page 1038.)
Stratford Bridge & Iron Works Co., Stratford, Ont.
Woodstock Wind-Motor Co., Limited, Woodstock, Ont.

2790 WINDOW SHADE CLOTH.

See Cloth, Window Shade.

2791 WINDOWS, Church and Memorial.

Castle & Son, Montreal, Que.
*Dominion Stained Glass Co., Toronto, Ont.
Hobbs Mfg. Co., Limited, The, London, Ont.
Luxfer Prism Co., Limited, Toronto, Ont.
Maritime Art Glass Works, Limited, St. John, N.B.

2792 WINDOWS, Fireproof.

Galt Art Metal Co., Limited, The, Galt, Ont. (Adv. page 1034.)
Matthews, A., Toronto, Ont.
*Metal Shingle & Siding Co., Limited, Preston, Ont. (Adv. page 999.)
*Metallic Roofing Co. of Canada, Limited, The, Toronto, Ont. (Adv. pages 994-995.)
*Ormsby, A. B., Limited, Toronto, Ont. (Adv. page 1039.)
*Pedlar Metal Roofing Co., The, Oshawa, Ont.
Wheeler & Bain, Toronto, Ont.
Winnipeg Ceiling & Roofing Co., Winnipeg, Man.

2793 WINES.

*Boivin, Wilson & Co., Montreal, Que.
Bright, T. G., & Co., Niagara Falls, Ont.
Girardot Wine Co., Limited, Sandwich, Ont.
*Hamilton, J. S., & Co., Brantford, Ont.
Haskins, Raymond L., Hamilton, Ont.
Haskins Wine Co., The, Hamilton, Ont.
Hillrust Wine Mfg. Co., Limited, St. Catharines, Ont.
*Ontario Grape Growing & Wine Mfg. Co., The, St Catharines, Ont.
*St. David's Wine Growers Co., Toronto, Ont.
Stamford Park Wine Co., Limited, The, Niagara Falls, Ont.

2794 WINES, Still.

*Hamilton, J. S., & Co., Brantford, Ont.

2795 WINES, Unfermented.

Lytle, The T. A., Co., Limited, Toronto, Ont.
*Ontario Grape Growing & Wine Mfg. Co., The, St. Catharines, Ont.
*Tune, J., & Son, London, Ont.

2796 WIRE, Annealed and Bright.

Brantford Screw Co., Limited, Brantford, Ont. (Adv. page 858.)
Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
Laidlaw Bale-Tie Co., The, Hamilton, Ont
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Pender, James, & Co., Limited, St. John, N.B.
Waterous Wire & Nail Works, Brantford, Ont.

2797 WIRE, Barb.

Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)

2798 WIRE, Bookbinders', Broom and Bottling.

Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
Freyseng Cork Co., Limited, Toronto, Ont.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)

2799 WIRE, Brass, Copper and Coppered.

Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
*Phillips, Eugene F., Electrical Works, Limited, Montreal. Que.
Wire & Cable Co., The, Montreal, Que. (Adv. page 1033.)

2800 WIRE, Coiled.

Frost Wire Fence Co., Limited, Hamilton, Ont.
*McGregor Banwell Fence Co., Limited, The, Walkerville, Ont. (Adv. page 1037.)
Manitoba Anchor Wire Fence Co., Limited, The, Winnipeg, Man.
New Brunswick Fence Co., Limited, The, Moncton, N.B.

2801 WIRE, Electric, Bare and Insulated.

Canadian General Electric Co., Limited, Toronto, Ont.
Dominion Electrical Works, Limited, Halifax, N.S.
Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv page 847.)
*Phillips, Eugene F., Electrical Works, Limited, Montreal, Que.
Wire & Cable Co., The, Montreal, Que. (Adv. page 1033.)

2802 WIRE, Galvanized.

Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
Manitoba Anchor Wire Fence Co., Limited, The, Winnipeg, Man.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)

2803 WIRE, Gold and Silver.

*Canadian Seamless Wire Co., Limited, Toronto, Ont.
*Lees, Geo. H., & Co., Limited, Hamilton, Ont.
*Wilkinson, The J. E., Co., Limited, Toronto, Ont.

2804 WIRE, Hay (in coils and cut in lengths).

Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
Laidlaw Bale-Tie Co., The, Hamilton, Ont.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)

2805 WIRE, High Carbon Steel.

Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
Laidlaw Bale-Tie Co., The, Hamilton, Ont.

2806 WIRES, Millinery.

Walker, E. C., & Sons, Toronto, Ont.

2807 WIRE, Nail, Rivet, Bolt and Tie.

Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
Graham Nail Works, The, Toronto, Ont.
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
Laidlaw Bale-Tie Co., The, Hamilton, Ont.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)

2808 WIRE, Oiled and Annealed.

Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Dominion Wire Mfg. Co., Limited, Montreal, Que. Adv. page 847.)
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
Laidlaw Bale-Tie Co., The, Hamilton, Ont.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
*Pender, James, & Co., Limited, St. John, N.B.
Waterous Wire & Nail Works, Brantford, Ont.

2809 WIRE, Seamless, Goldfilled.

*Canadian Seamless Wire Co., Limited, Toronto, Ont.

2810 WIRE, Spring and Mattress.

Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Dominion Wire Mfg. Co., Limited, Montreal, Que. Adv. page 847.)
Manitoba Anchor Wire Fence Co., Limited, The, Winnipeg, Man.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)
Ross & Howard Iron Works Co., Limited, Vancouver, B.C.

2811 WIRE, Steel.

Dominion Wire Mfg. Co., Limited, Montreal, Que. Adv. page 847.)
Manitoba Anchor Wire Fence Co., Limited, The, Winnipeg, Man.
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)

2812 WIRE, Straightened and Cut.

Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)

2813 WIRE, Tinned.

Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
Greening, The B., Wire Co., Limited, Hamilton, Ont. (Adv. page 1044.)
*Montreal Rolling Mills Co., Montreal, Que. (Adv. page 842.)

2814 WIRE, Trolley.

Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
*Phillips, Eugene F., Electrical Works, Limited, Montreal, Que.

2815 WIRE CABLES.

See Cables, Electric, Telegraph and Telephone.

2816 WIRE CLOTH.

See Cloth, Wire.

2817 WIRE GOODS.

Canada Screw Co., Limited, Hamilton, Ont. (Adv. page 1024.)
Dennis Wire & Iron Works Co., Limited, London, Ont. (Adv. page 1043.)
Dominion Wire Mfg. Co., Limited, Montreal, Que. (Adv. page 847.)
Kemp Mfg. Co., Toronto, Ont.
Major Mfg. Co., Limited, The, Montreal, Que.
*Meadows, The Geo. B., Toronto Wire, Iron & Brass Works Co., Limited, Toronto, Ont. (Adv. page 1009.)
*Munro Wire Works, Limited, New Glasgow, N.S.
*Page Wire Fence Co., Limited, The, Walkerville, Ont.
*Schmidt & Co., Winnipeg, Man.
Shipway Iron, Bell & Wire Mfg. Co., Limited, Toronto, Ont.

2818 WIRE ROPES AND STRANDS.

See Ropes, Wire, and Strands, Wire.

2819 WOOD PRODUCTS.

*Standard Chemical Co. of Toronto, Limited, The, Toronto, Ont. (Adv. page 1032.)
*Wood Products Co. of Canada, Limited, The, Toronto, Ont.

2820 WOOD, Pulp.

Breakey, John, Chaudiere Mills, Que.
*Burrill Lumber Co., The, Shawinigan Falls, Que.

*Dominion Paper Co., Montreal, Que.
*Kane, John C., Quebec, Que.
*Mems Lumber Co., The, Price, Que.
Mineral Range Iron Mining Co., Limited, The, Bessemer, Ont.
Oyamel Co., Quebec, Que.

2821 WOOD TURNINGS.

See Turned Goods, Wood.

2822 WOODBOARD.

Miller Bros. Co., Limited, The, Montreal, Que.
St. Croix Paper Co., Limited, Halifax, N.S.
Trent River Paper Co., Limited, The, Frankford, Ont.

2823 WOODEN NOVELTIES.

See Novelties, Wooden.

2824 WOODENWARE.

Connor, J. H., & Son, Limited, Ottawa, Ont.
Gignac, J. H., Limited, Quebec, Que.
*Hourd & Co., Limited, London, Ont.
Keenan Woodenware Mfg. Co., Limited, Owen Sound, Ont.
*Meakins & Sons, Hamilton, Ont.
Meakins Brush Co., Limited, Montreal, Que.
*Schultz Bros. Co., Limited, The, Brantford, Ont.
*Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
*Taylor, Scott & Co., Toronto, Ont.
*Thomas Bros., Limited, St. Thomas, Ont.
United Factories, Limited, Toronto, Ont. (Adv. page 1023.)

2825 WOODWORK, Carriage.

Ackland, D., & Son, Limited, Winnipeg, Man.
*Armstrong, The J. B., Mfg. Co., Limited, Guelph, Ont. (Adv. page 996.)
*Canada Wheel Works, Limited, The, Merritton, Ont.
Heard, John, & Co., St. Thomas, Ont.
Hore, F. W., & Son, Limited, Hamilton, Ont.
*Victoria Wheel Works, Galt, Ont. (Adv. page 843.)
*Windsor Turned Goods Co., Limited, The, Windsor, Ont.

2826 WOODWORK, Interior.

See Mills, planing; Fittings, wood (bank, store and office); Mouldings; Blinds, window (wood).

2827 WOODWORK, Sanitary.

See Seats, Closet.

2828 WOOL, Mineral.

See Mineral wool.

2829 WOOL PULLERS.

Calvert & Dwyer Co., Limited, The, Toronto, Ont.
*Kimble, John, & Son, St. John, N.B.
Turgeon, Elie, Quebec, Que.

2830 WOOL STOCK.

*Smith Mfg. Co., Limited, The, Toronto, Ont.

2831 WRAPPERS AND DRESSING SACKS.

*Allen Mfg. Co., Limited, Toronto, Ont.
Black, John P., & Co., Limited, Montreal, Que.
*Gale Mfg. Co., Toronto, Ont.
Ideal Women's Wear, Limited, Toronto, Ont.

2832 WRENCHES.

*Canadian Billings & Spencer, Limited, Welland, Ont. (Adv. page 1031.)
*Ontario Malleable Iron Co., Limited, The, Oshawa, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)
Warnock, The James, Co., Limited, Galt, Ont.
*Whitman & Barnes Mfg. Co., The, St. Catharines, Ont.

2833 WRINGERS, Clothes.

Connor, J. H., & Son, Limited, Ottawa, Ont.
Dowswell Mfg. Co., Limited, The, Hamilton, Ont.
*Maxwell, David, & Sons, St. Mary's, Ont.
Smart, The James, Mfg. Co., Limited, Brockville, Ont. (Adv. page 1020.)

Y

2834 YACHTS, Sailing.

See Boats, Steamers and Yachts.

2835 YARNS, Carpet, Wool, Worsted.

Cornwall & York Cotton Mills Co., Limited, St. John, N.B.
Glen Woollen Mills, Limited, Glen Williams, Ont.
Slingsby Mfg. Co., Limited, The, Brantford, Ont.
Toronto Carpet Mfg. Co., Limited, Toronto, Ont.

2836 YARNS, Cotton.

*Canadian Colored Cotton Mills Co., Limited, The, Montreal, Que. (Adv. page 846.)
*Carter, E. T., & Co., Toronto, Ont.
Cornwall & York Cotton Mills Co., Limited, St. John, N.B.
*Dominion Textile Co., Limited, Montreal, Que.
Hamilton Cotton Co., Hamilton, Ont. (Adv. page 870.)
Montreal Cotton Co., Valleyfield, Que.
*Morrice, The D., Co., Limited, Montreal, Que.

2837 YARN DYERS.

Toronto Carpet Mfg. Co., Limited, Toronto, Ont.

2838 YARNS, Fingering and Saxony.

Forbes, R., Co., Limited, Hespeler, Ont.
Paton Mfg. Co., Sherbrooke, Que. (Adv. page 850.)

2839 YARNS, Knitting (Woollen).

Beaumont, Joseph, Glen Williams, Ont.
Bird Woollen Mill Co., Limited, The, Bracebridge, Ont.
Brown & Wigle Co. of Kingsville, Limited, Kingsville, Ont.
Cornwall & York Cotton Mills Co., Limited, St. John, N.B.
Dontigny, Philip, Arnprior, Ont.
Forbes, R., Co., Limited, Hespeler, Ont.
Glen Woollen Mills, Limited, Glen Williams, Ont.
Grant, James, Chesley, Ont.
Harris & Co., Limited, Rockwood, Ont. (Adv. page 851.)
*Hewson Woollen Mills, Limited, Amherst, N.S.
Magog Woollen Mills, Limited, Sherbrooke, Que.
*Oxford Mfg. Co., Limited, Oxford, N.S.
Paton Mfg. Co., Sherbrooke, Que. (Adv. page 850.)
Slingsby Mfg. Co., Limited, The, Brantford, Ont.

2840 YARNS, Warp or Beam, Skein or Chain.

Cornwall & York Cotton Mills Co., Limited, St. John, N.B.
Hamilton Cotton Co., Hamilton, Ont. (Adv. page 870.)

2841 YARNS, Worsted.

Forbes, R., Co., Limited, Hespeler, Ont.
Paton Mfg. Co., Sherbrooke, Que. (Adv. page 850.)

2842 YEAST.

*Gillett, E. W., Co., Limited, Toronto, Ont.
*Pure Gold Mfg. Co., Limited, Toronto, Ont.

2843 YOKES, Neck.

*Cameron, Dunn Mfg. Co., Limited, The, Strathroy, Ont. (Adv. page 852.)
*Columbia Handle & Lumber Co., London, Ont.
Heard, John, & Co., St. Thomas, Ont.
*Pink, Thomas, Pembroke, Ont.
*Still, J. H., Mfg. Co., Limited, St. Thomas, Ont.

Z

2844 ZINCS, Battery.

Canada Metal Co., Limited, The, Toronto, Ont. (Adv. page 869.)

2845 ZINC, Chloride of.

Cowan, John, Co., Limited, Montreal, Que.

2846 ZINC, ground in oil.

*Brandram-Henderson, Limited, Montreal, Que. (Adv. page 840.)
*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)
*Martin Senour Co., Limited, The, Montreal, Que.
Muirhead A., Toronto, Ont.
*Ramsay, A., & Son Co., Montreal, Que.
Robertson, The James, Co., Limited, Montreal, Que.
Stephens, G. F., & Co., Limited, Winnipeg, Man.

2847 ZINC, ground in varnish.

Muirhead, A., Toronto, Ont.
Stephens, G. F., & Co., Limited, Winnipeg, Man.

2848 ZINC, Oxide.

*Canada Paint Co., Limited, The, Montreal, Que. (Adv. page 1027.)

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THE CHILD AND ITS FUTURE.

IT may be stated fairly that not enough consideration is given to the up-bringing of at least four-fifths of the children of Canada. This statement applies as much or more to the country and small towns as to cities.

For children who should, but do not, attend the public school we have the truant officer to enforce the parents or guardians instructions for attendance, but when once the child enters a factory, except under the apprenticeship system, little or no control of the child can be or is enforced.

The age of a child going into a factory should not be less than fourteen years. But employers are often deceived by parents who find it imperative to use every and all means to earn money. As a rule such instances are caused by the serious and continuous illness of a parent who has been the breadwinner. Instances, though, are frequent when it is nothing but parents' avariciousness; sometimes the blame is on the man who employs them.

In cases where the child leaves school before the fourteenth year, a system of following the child's interests should be instituted and some system adopted where relief, if necessary, may be given without subjecting the receivers to be wards of charity, even for a moment. It is very rare when an employer will willingly engage a child under fourteen, and generally in even these few cases, he is importuned by the circumstances urged by parents. Yet there is no municipal or provisional officers whose duty it is to follow the child so forced into a premature responsibility, and learn the circumstances which apparently warrant it.

A remedy must be found, and may it not be in a trade school? One of the complements of the trade-school should be the Apprenticeship Indenture, and a system of remuneration for work. This remuneration, as well as the up-keep of the school, should be a part charge on the Government and partly on the employers, whose apprentices are deriving special benefits from the attendance at the school. The Government's allowances would be legitimate, because it will reduce costs now necessary, in part, for prisons, reformatories, children's homes, asylums, etc., and increase the revenue, by the developments which will follow the growth and expansion of industrial education.

The underlying principle which should always be kept in evidence, is that of proper self-reliance. This will generate the further principle that earnings will be governed by ability, earnestness and perseverance.

One of the doctrines which should meet with general acceptance is, that every boy-workman is entitled to a level start. In the fundamental education of a child, preparation for him to take his place on an equality with any other child is essentially necessary. To have this there must be hand-work as well as brain-work. Then as the hand becomes familiar with instruments by which to construct, the mind suggests which line of industry will offer the best opportunities for the skill of its trained hands, and so, ambition born of a desire for greater achievement leads the coming mechanic and foreman in embryo to the technical school, and here his intelligence is guided to think and act so as to become a unit in the development of the country's commerce, industry and welfare.

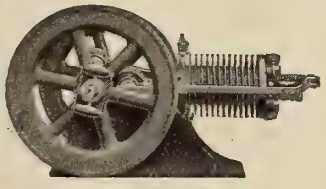
This Government allowance should find its way to the trade-school through the University. The buildings and equipment might be provided by the municipality. The raw material for University graduates are the children who enter the kindergarten, and as a manufacturer cares for his raw material through all its phases, until the finished article is completed, so, too, should the University; and the greatest of care should be taken of this the most valuable of all raw materials. The children of the workman, mechanic or craftsman is entitled to his share of this suggested watchfulness and care by the University. He pays his share of taxes from which are drawn the funds for University support and expansion.

The management and operation of trade schools should be under the guidance of men who have had practical experience of management in a factory or trade. The school should represent the actual conditions of industrial life.

During the last term in the school, every alternate day or week should be in the factory, and in this way no time will be lost in becoming accustomed to the new conditions. It may be found necessary to continue apprenticeship for the boy for a time after he enters the factory workshop. Immediate freedom from restraint may be injurious to discipline.

Employers are necessarily bound to give this subject their time, thought and support. The education of industrial workers is receiving attention throughout the English-speaking world. Canada must not be behindhand.

The Manitoba Iron Works, Limited, have just completed the installation of electric motors throughout their shops, having discarded steam except for heating purposes. They have installed approximately 200 horse power, distributed amongst twelve motors, and the whole plant is now operated by electricity purchased from the Winnipeg Street Railway Co. A fine new compound duplex intercooler air compressor, Rand make, has been placed, and a new Allen riveting machine and several large air hoists for the boiler and structural shop have been installed, which, with many minor improvements, leaves this fine plant in a high state of efficiency for the season's business. The company has already booked a large number of orders for execution this season.



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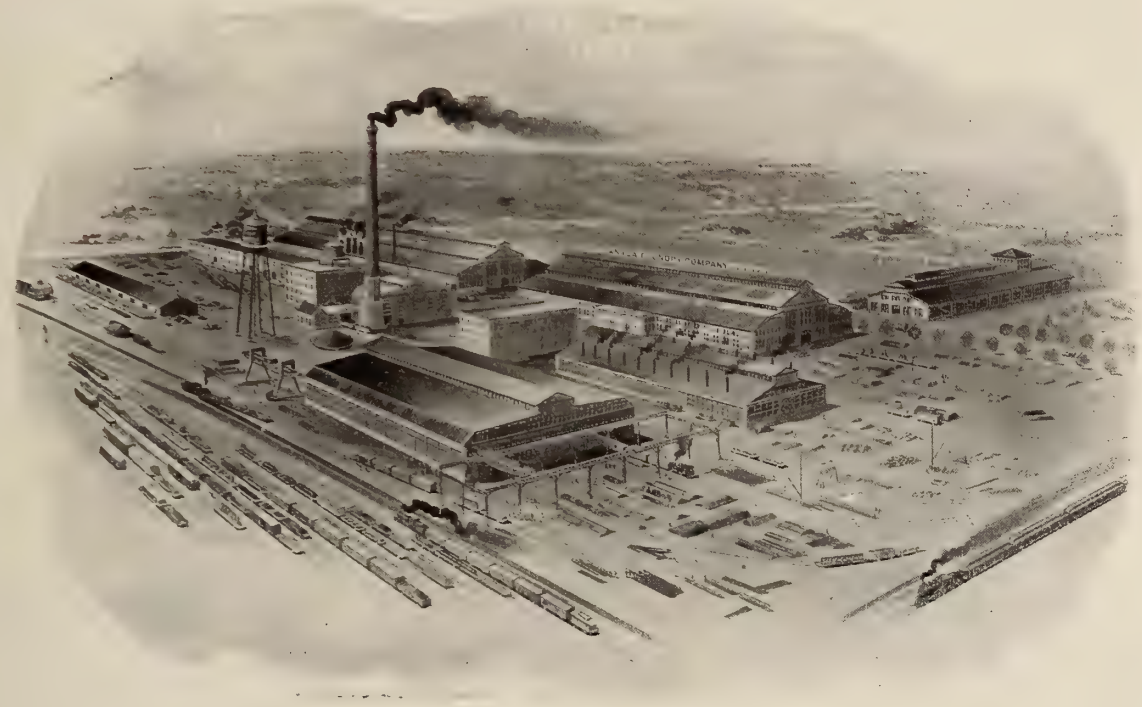
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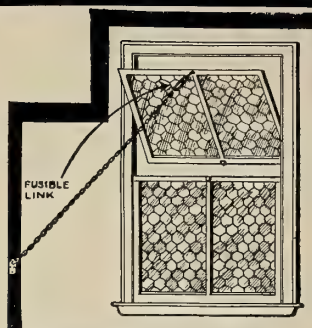
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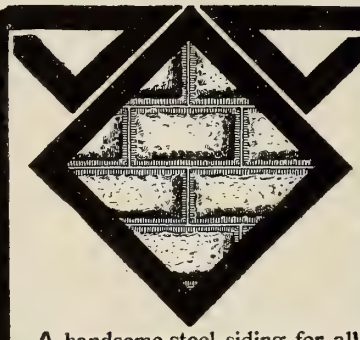
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is fire and damp proof—resists all weather conditions—is very reasonably priced—and can be so easily applied it gives universal satisfaction.

Find further facts about it in our catalog.

Metallic Roofing Co., Limited,
Wholesale Manufacturers,
Toronto, - - Canada



EAVE TROUGHS AND CONDUCTOR PIPES

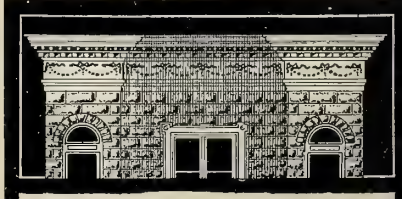
Made of the best brands of Galvanized Steel Plate, and sold by us, with all fittings, for less than it costs small dealers to make them.

Our Corrugated Expansion Pipe, in 10 ft. lengths without cross seams, is admitted the best pipe made.

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Offer you splendid improvement, at small cost, for any style of building.

We make them complete, to suit any sized or shaped structure—the entire metal finish including door and window caps, cornices, etc.—in a great variety of styles.

They give a very handsome effect, and enduring, practical satisfaction.

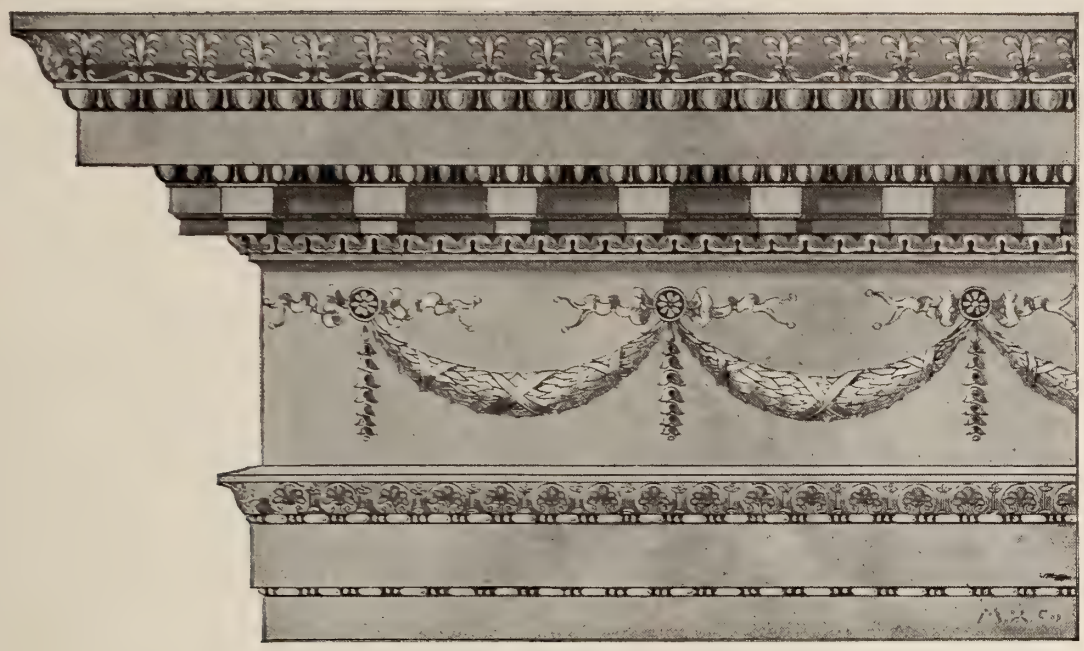
We give estimates if you send measurements and outline of the building.

Think it over.

Metallic Roofing Co.,
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Wholesale Manufacturers,
Toronto, Canada.

The Metallic Roofing

Manufacturers, Contractors, Exporters



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We manufacture everything that is up-to-date and reliable in Architectural Sheet Metal for all kinds of buildings. Our prices are as low as is consistent with really first class material and workmanship.

We do **NOT** make any "cheap trash."

COPY OF TESTIMONIAL.

The METALLIC ROOFING CO. OF CANADA, Limited.
TORONTO.

Lucknow, Ont., April 9th, 1908

Dear Sirs:—"I take great pleasure in testifying to the good qualities of your "Eastlake" Shingles. We put your painted shingles on our Town Hall here in 1885, 23 years ago, and although they have only been painted twice since that time they are in good condition yet. I consider the lock on the "Eastlake" the very best, and believe that a roof covered with the galvanized "Eastlake" will last forever.

(Signed) THOS. LAWRENCE,
Hardware Merchant

Co. of Canada, Limited

TORONTO AND WINNIPEG

ESTABLISHED 1834

INCORPORATED 1876

ARMSTRONG STANDARD BUGGY

TRADE MARK REGISTERED

Cable Addresses { ARMSTRONG, GUELPH / STRONGARM, GUELPH

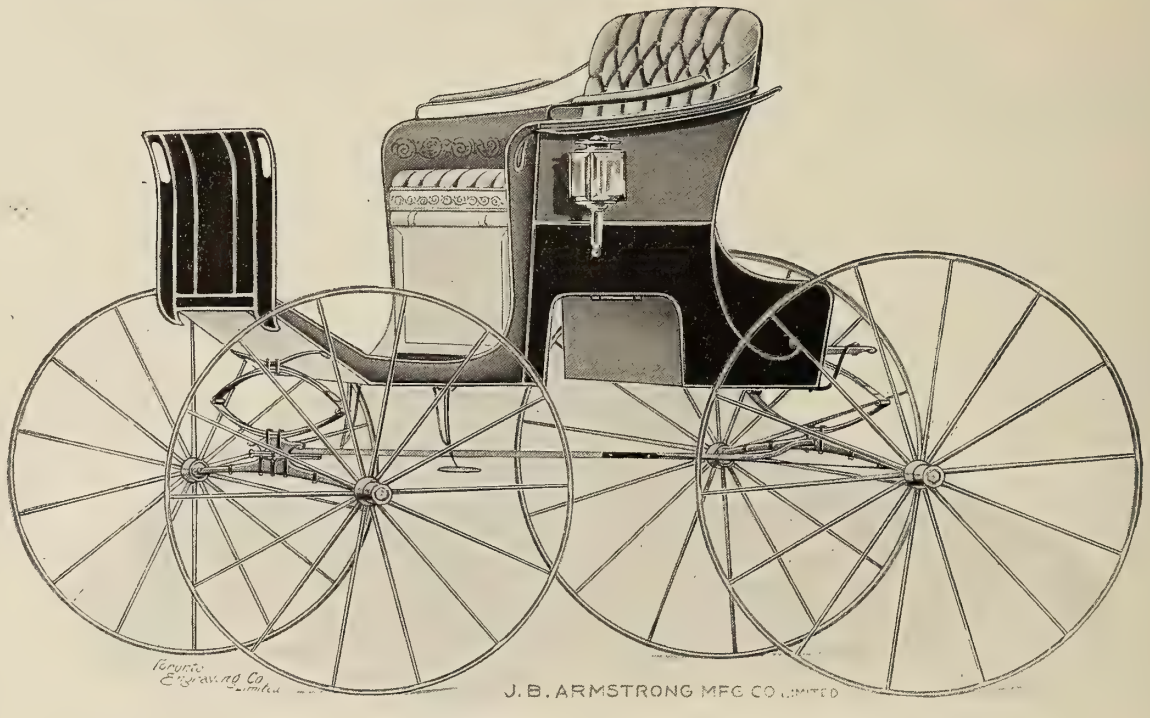
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(The Guelph Carriage Goods Co.)

GUELPH, - - CANADA

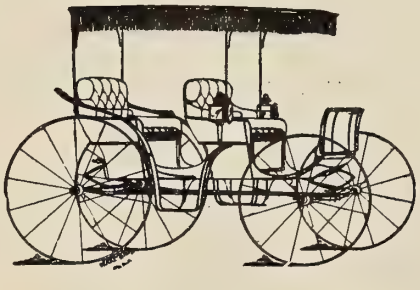
Manufacturers of FINE FINISHED CARRIAGES



Style No. 170—Ladies' Stanhope. Cushion or Solid Rubber Tires.

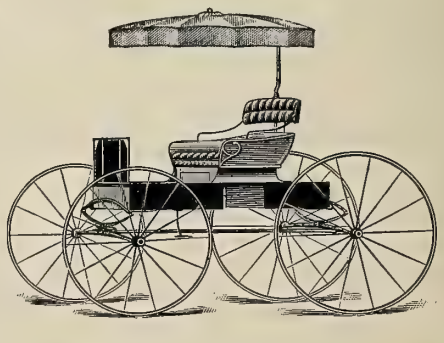
Our Line covers nearly one hundred different styles, including Light Gentlemen's Driving Concord Road and Bike Wagons, Top Buggies, Phaetons, Jump Seats, Traps, Surreys, Mountain Wagons and Buggies, Farmers' Democrats, Ranch Wagons and Carts.

Catalogue describing, mailed from Guelph on application. See exhibit at Franco-British Exhibition, London, 1908.



Medals were awarded our Exhibits at :

Sydney, 1877
Paris, 1878
London, 1886
Melbourne, 1888
Chicago, 1893
Quebec, 1894
Toronto (Three)



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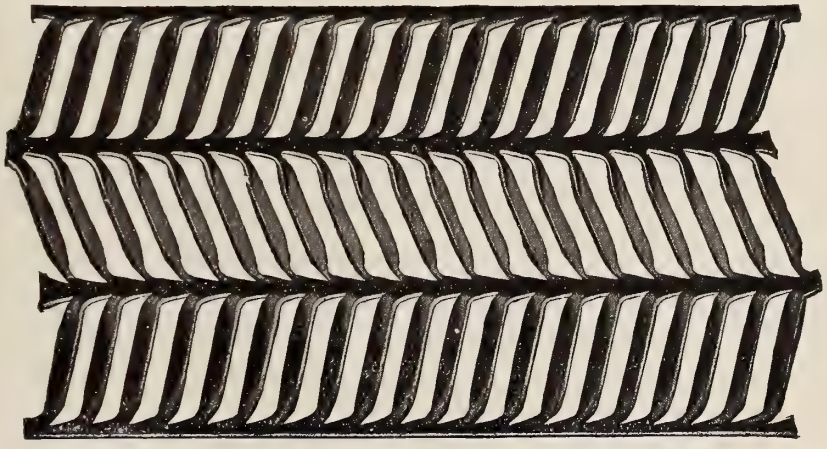


give the most handsome, durable and economical finish for any kind of building. They never crack or warp like plaster or wood ceilings, and when dirty, they can be readily cleaned with soap and water. They admit of decoration in unlimited variety, and this is very cheaply done, as the paint spreads easily over the metal without any loss from absorption.

Our CLASSIFIED METAL CEILINGS are more easily erected than any others. The joints fit together perfectly, making no break in the general design. Any mechanic can erect our ceilings, by following the careful plans which we send out with every order.

Our "Herringbone" Expanded Steel Lath

is positively the most rigid expanded metal lath on the market. It is the easiest to apply on the studding, and the easiest to plaster. Takes fewer studs and less plaster than any other lath. Its edges are absolutely uniform, and there is no waste from overlapping. Write for our literature and free samples.



We make everything in the line of Sheet Metal Building Goods.

We cheerfully send our catalogues free to any part of the world. Upon receipt of measurements either in feet or in meters, we will submit an estimate on any job in which Sheet Metal Building Goods may be required. We give special attention to export orders.

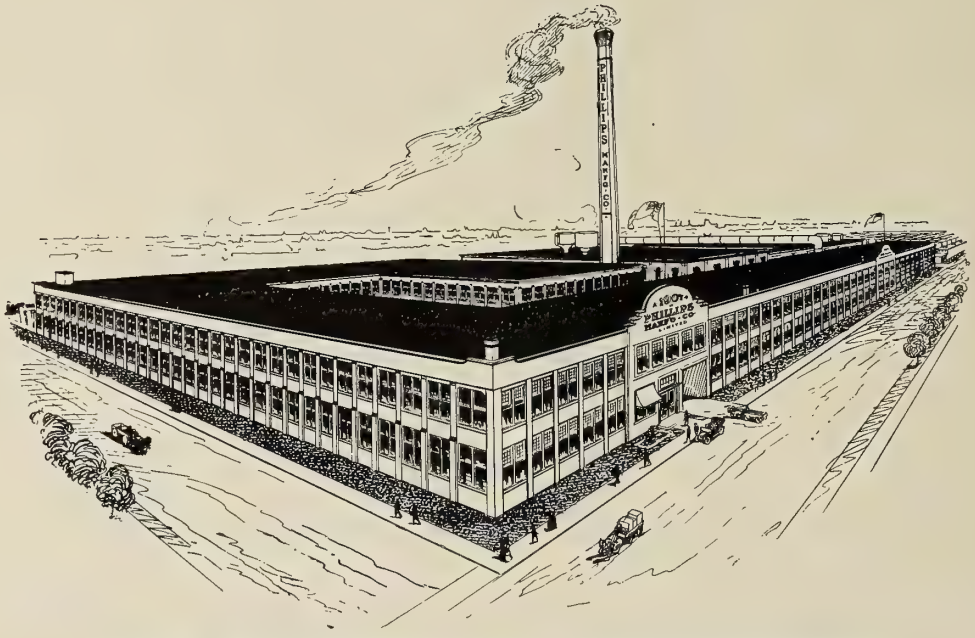
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OUR BUSINESS having outgrown our old premises, we recently erected and are now occupying our new factory on Carlaw Avenue, with capacity more than doubled and largely increased facilities.

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PHILLIPS Manufacturing Co. Limited

Carlaw Avenue

TORONTO - ONT.

Important to Canadian Manufacturers

One of the main necessities of your manufacturing progress is the finding of new buyers for your output.

As most manufactured goods reach the consumer through the medium of jobber and retailer, the more the jobbers and retailers know about you and your goods the better are your prospects of obtaining new customers and holding old ones.

The best and most inexpensive way for any manufacturer to keep his proposition constantly before the jobbers and retailers who sell—or ought to sell—his goods, is to talk to them unceasingly through the trade paper which most of them read.

For twenty-three years the Maclean Publishing Company, Limited, have been successfully building up several trade newspapers, which are now regarded as trade authorities. The firm grip which these papers have upon their readers is maintained through an unequalled organization of highly trained editors and correspondents. All that is of interest to the trade is collected, sifted and published while it is fresh and vital. We maintain resident managers in Toronto, Montreal, Winnipeg, Vancouver, Chicago, New York, and London, Eng. Besides which we have paid correspondents in all the larger centres of Canada from ocean to ocean. We have in all 56 salesmen.

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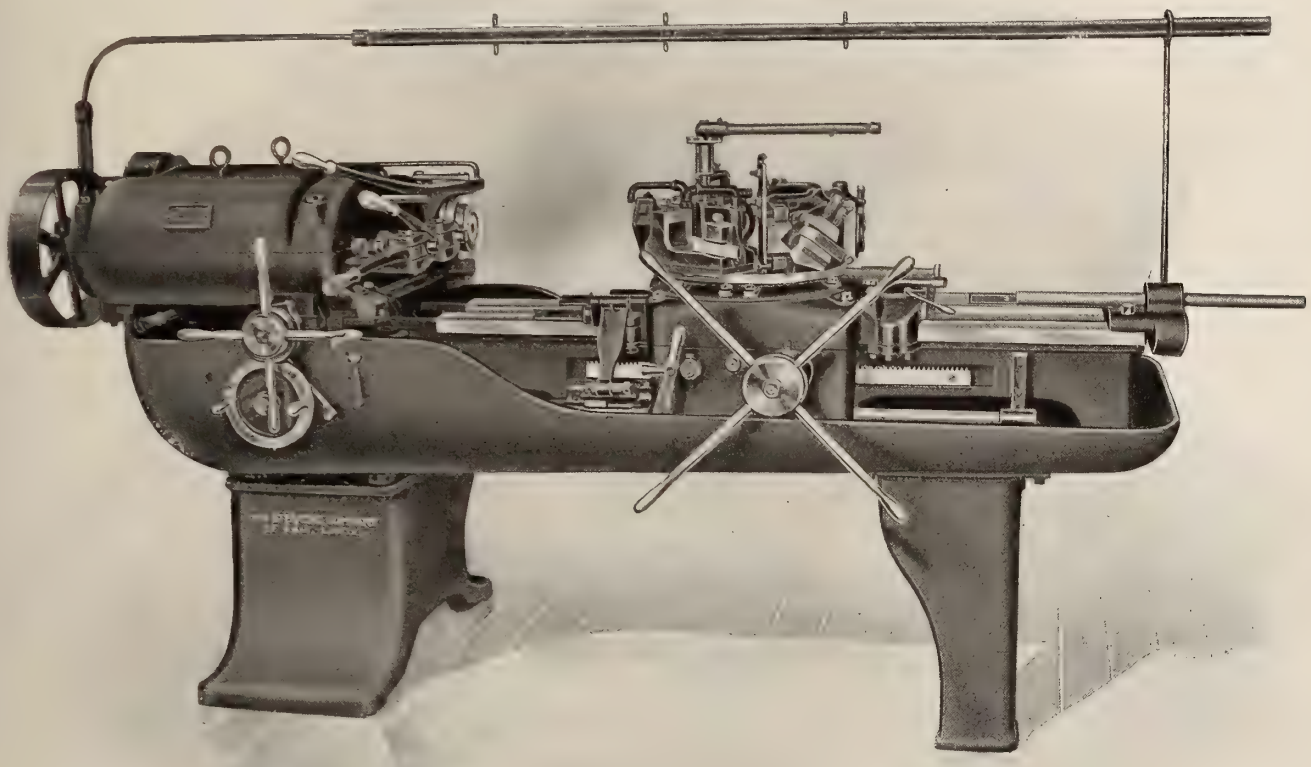
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All the features of the United States machine, together with many desirable additions of our own.

The Flat Turret Lathe is now recognized as indispensable in all modern machine shops, it being a REMARKABLE PROFIT-MAKER.

Investigate Thoroughly and you will Keep your Money in Canada

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ARE now carrying a portion of the insurance of the leading manufacturers throughout the Dominion. These Companies are operated at a small cost. The usual profit from underwriting realized by Stock Companies is saved to the manufacturer. The principle of security is clearly established by all insurance being written on the Premium Note Plan. There is, therefore, no fluctuating or speculative securities to be paid for out of the insurance premiums. The principle of isolated risks is rigidly adhered to. These Companies will never have an accumulation of risks in congested districts of the cities. We estimate that the manufacturers have been carrying a useless burden of from 25 to 40 per cent.

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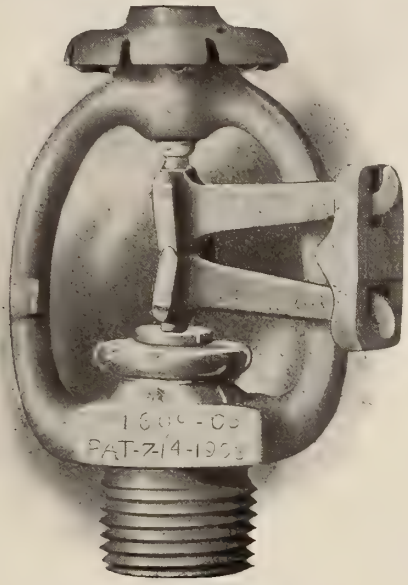
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¶ At each distributing point, throughout all Canada, strong firms are handling our lines and are ready to meet all demands of the retail trade.

¶ The main part of our industry is dealt in SOLID LEATHER LINES, carrying as a "Standard" the leading and constant features of "Comfort" which regulates the choice of our lasts and styles.

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The Twenty Thousand Club

OF PORTAGE LA PRAIRIE, MANITOBA.

Office of the Secretary:
Twenty Thousand Club and Board of Trade.

Portage la Prairie, Man., June 1908

To Members Manufacturers' Association,
Industrial Canada.

Gentlemen :—

Please permit me to call your attention once again to Portage la Prairie, Manitoba.

No other point in Western Canada can possibly offer the same inducements to MANUFACTURERS, WHOLESALERS and JOBBERS; to CAPITALISTS and others seeking gilt-edged investments as Portage la Prairie and district.

Portage la Prairie, Manitoba, is positively the only city on the North American continent where FOUR great transcontinental railway systems—Grand Trunk Pacific, Great Northern, Canadian Northern and Canadian Pacific—intersect, providing railway distributing and shipping facilities to be found at no other point in Western Canada.

FREE SITES and other concessions are granted to INDUSTRIES under conditions, whilst land for residential purposes is undeniably cheaper here than at any other place in all of this great western country.

If you wish to participate to the fullest possible extent in an era of wonderful prosperity which is about to set in throughout this great, rich agricultural heritage, you must come where excellent railway facilities and equitable freight rates, together with an interchangeable transfer system and lowest rate of expenses, will prove the most beneficial.

It will give me particular pleasure to supply all desired information promptly.

Trusting that you are interested, and awaiting your commands, I beg to remain,

Very respectfully yours,

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Twenty Thousand Club and Board of Trade,
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"Canadian Club" Whisky

Fully Ripened in Wood. Age Guaranteed by Government.

QUALITY UNEXCELLED

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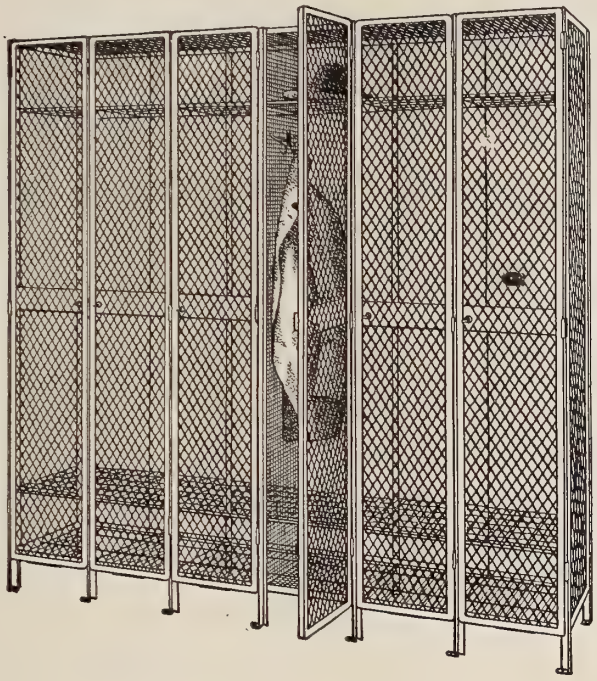
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render all departments of the factory subject to the eye of the Superintendent and they are fire proof also

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Cost less than glazing and protect property from being stolen or destroyed.

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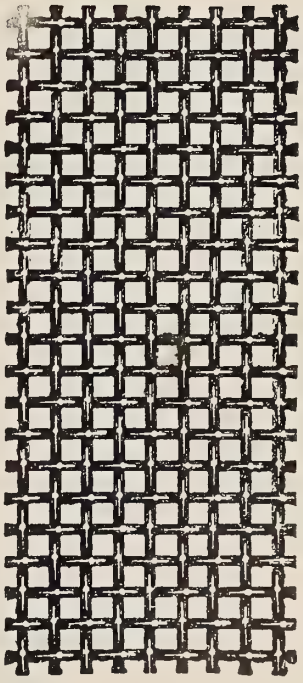
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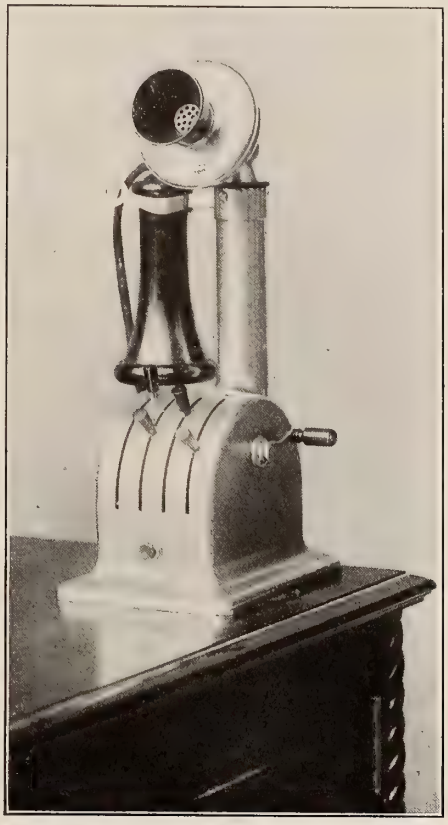
The Canadian Machine Telephone (recommended for exchanges of 200 telephones or more) automatically does the work of the "hello" girl better, quicker, more accurately and more economically and tells no secrets.

Are you interested in telephones? Write us for full information.

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GUARANTEED INDEPENDENT TELEPHONES

WE ARE BUILDING UP A NEW CANADIAN INDUSTRY, MANUFACTURING TELEPHONES ESPECIALLY FOR PEOPLE WHO ARE OPERATING INDEPENDENT OF THE TELEPHONE MONOPOLY

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You can have telephone supplies of all kinds shipped promptly from stock.

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For purity of color, exclusiveness of design, perfection of finish and moderate price, we claim to be without competition from any source.

We invite correspondence, and are ready at all times to manufacture designs specially suitable for souvenirs in any locality.

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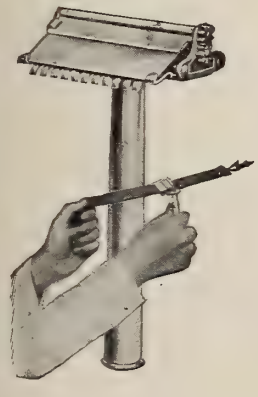
Made by a new and secret process by which the pure silver is, by fire, embedded into the glass or china, thus ensuring cleanliness, strength and durability.

This line is specially suitable for high-class jewelry trade, and is eagerly sought after for wedding presents, Xmas gifts and presentation purposes, being useful, handsome and unique.

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This Razor stands alone to-day as the most perfect shaving instrument the world has ever known.



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By a clever mechanical attachment the blade can be stropped to a keen edge in a few seconds, thus giving the user a constantly sharp razor, and the blades an indefinite life.

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LIBERAL DISCOUNT TO THE TRADE. SHIPMENTS TO ALL PARTS OF THE WORLD.

The Auto-Strop Safety Razor Co., Ltd.

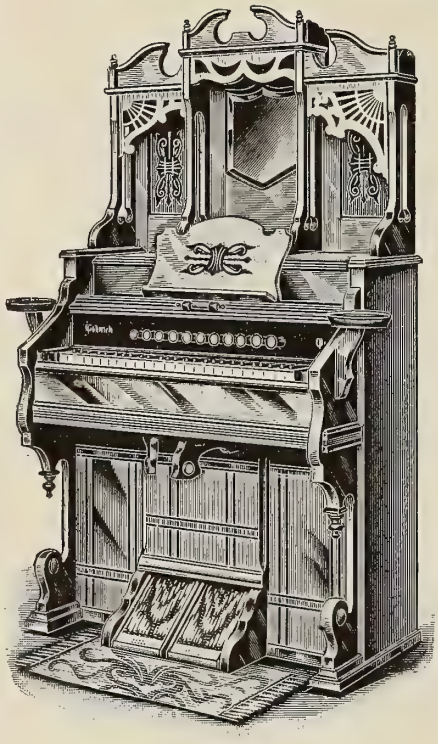
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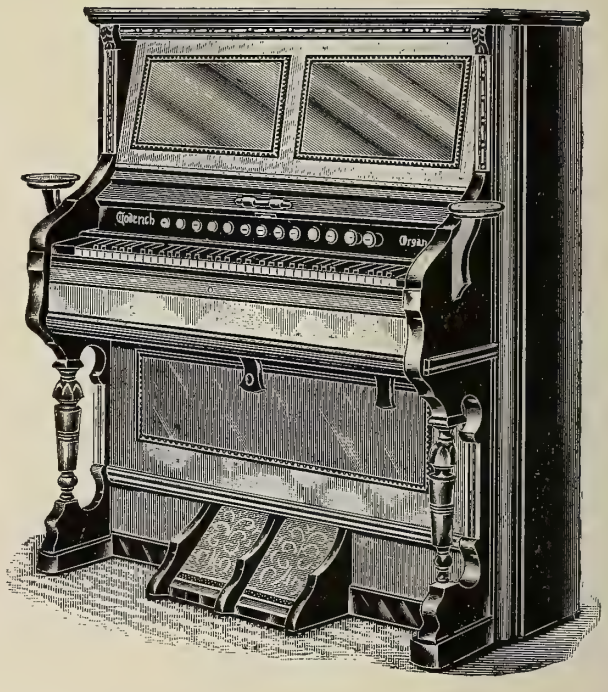
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PIANO BENCHES
MUSIC CABINETS

Good Freight Rates to any port in the world.

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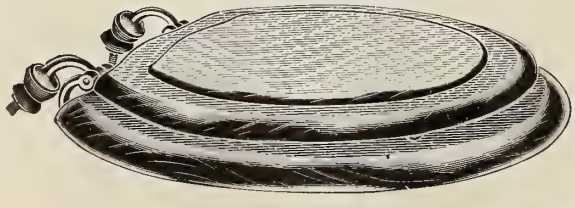


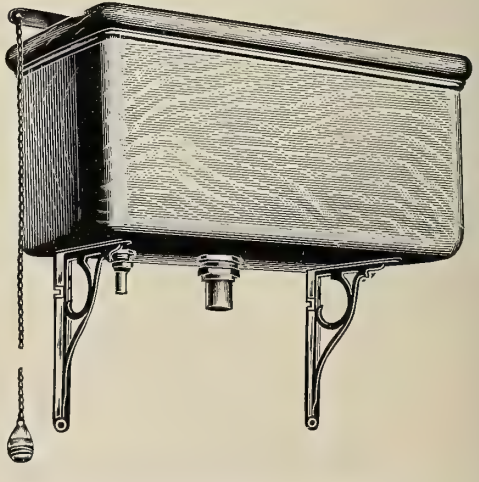
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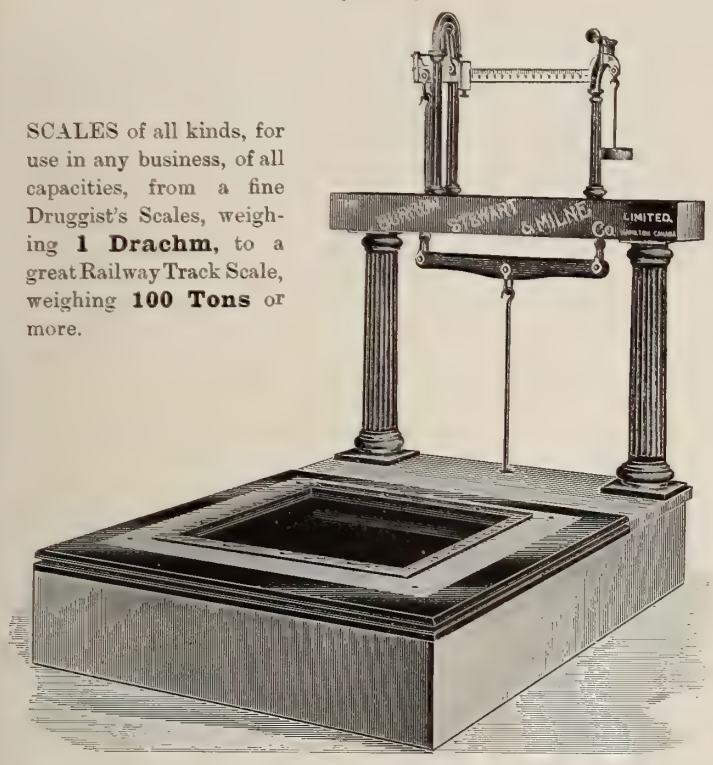
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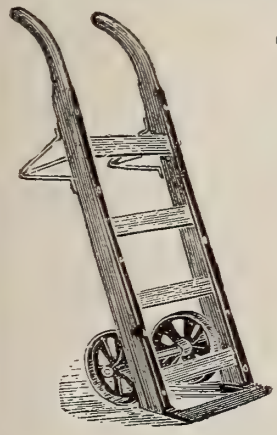
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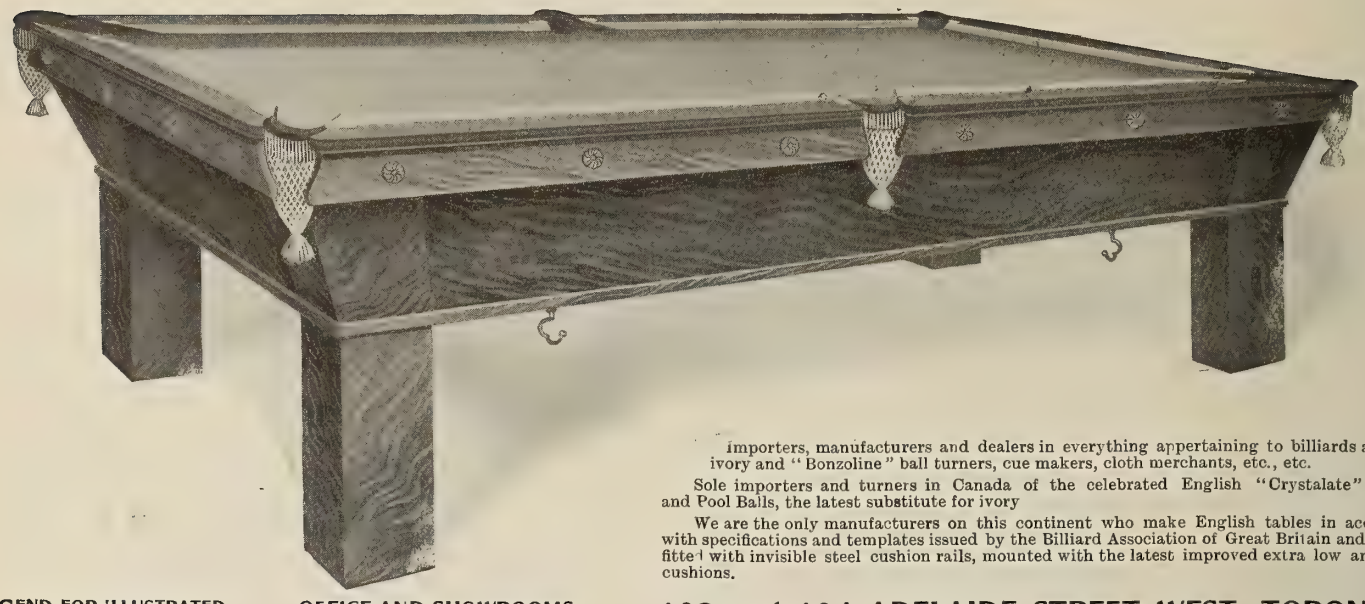
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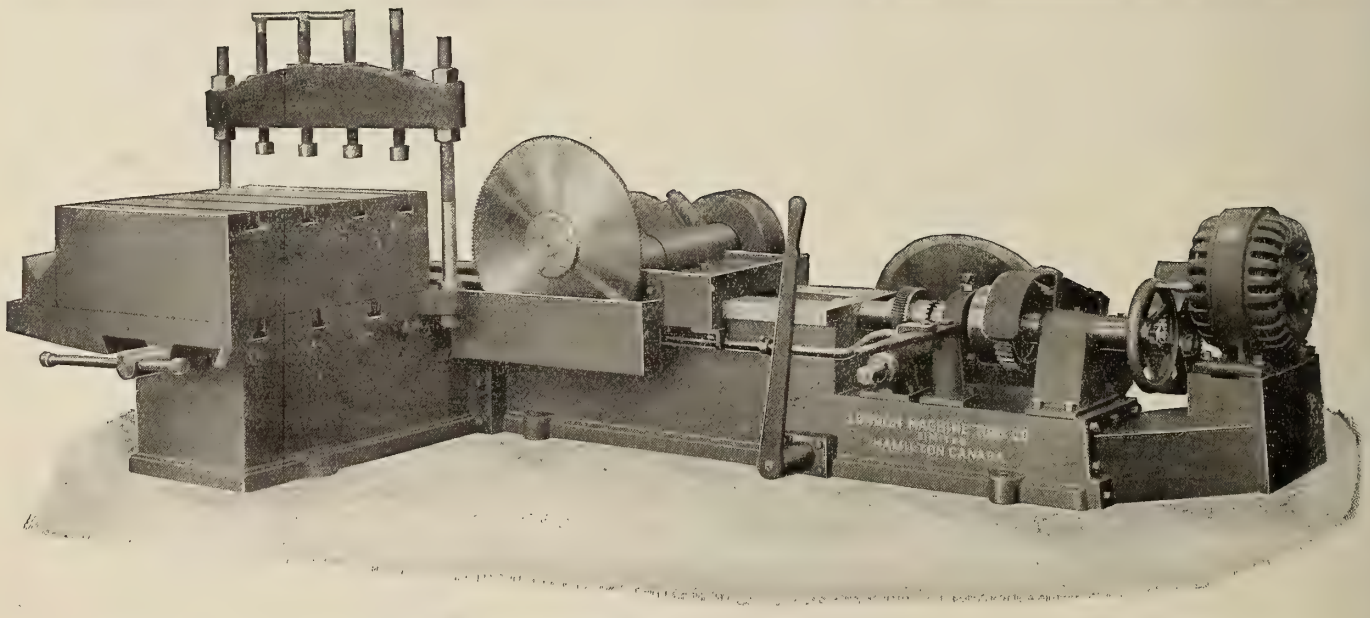
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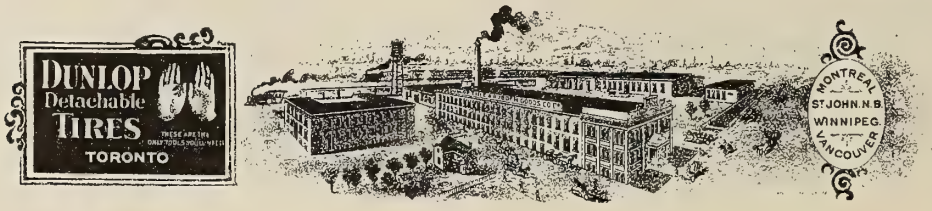
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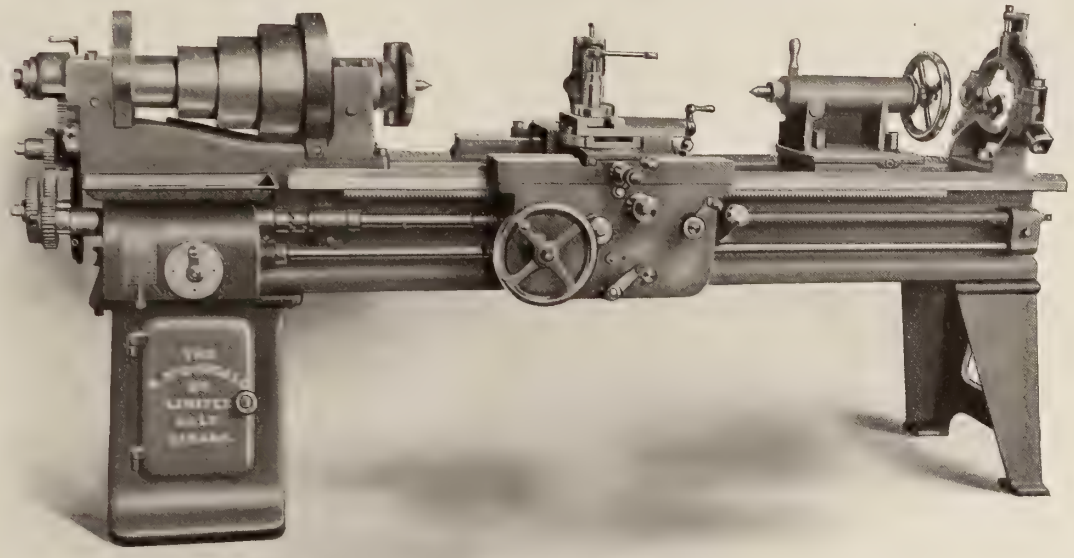
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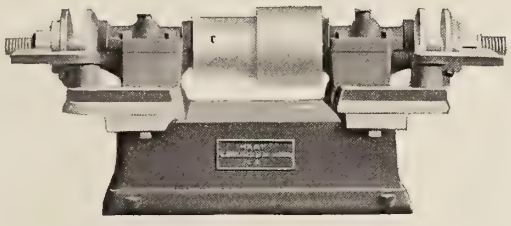


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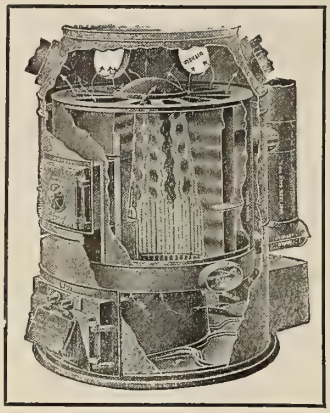
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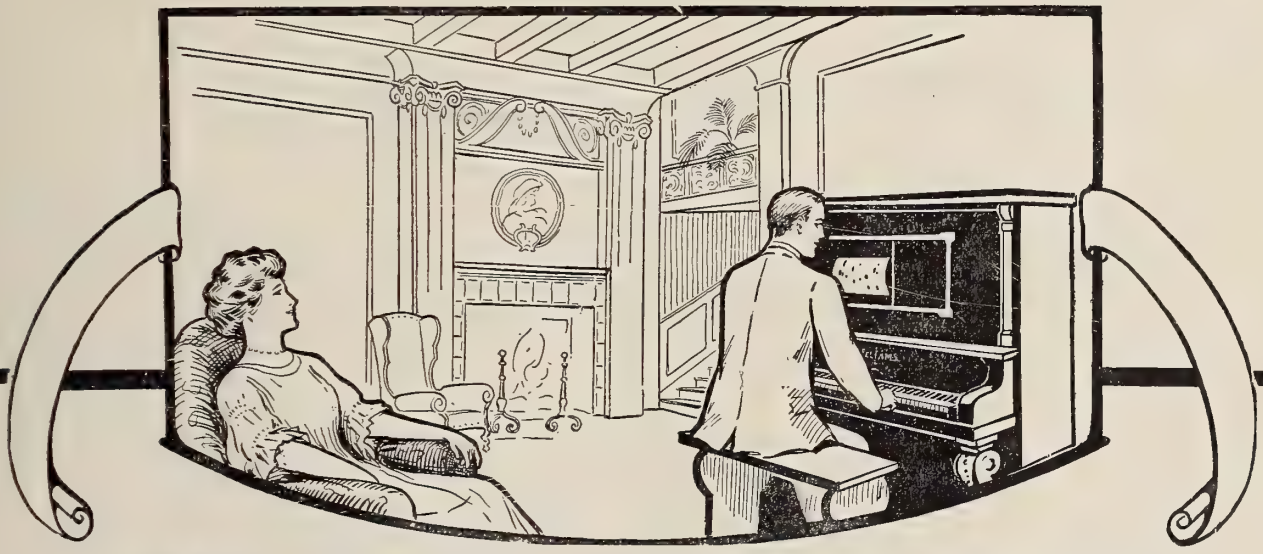


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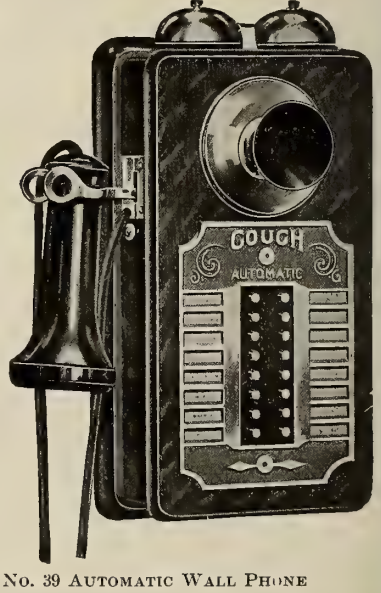
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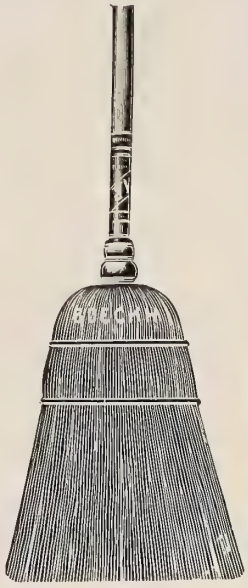
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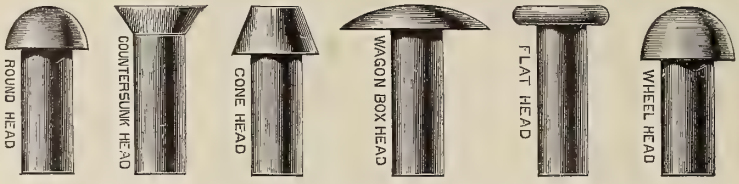
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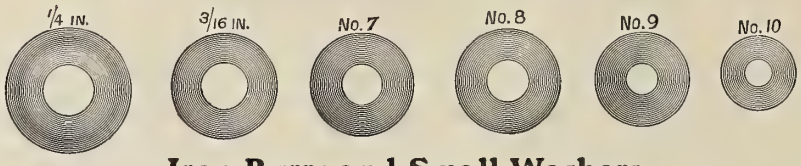
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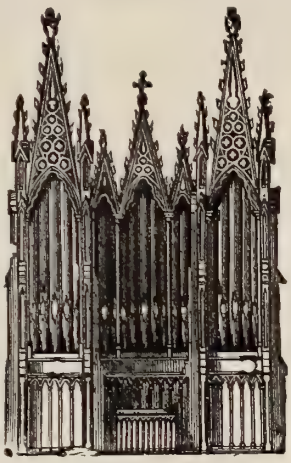
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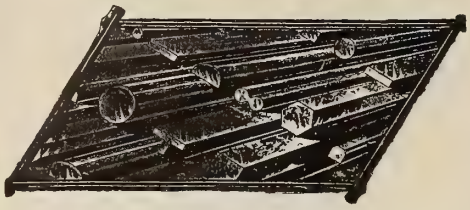


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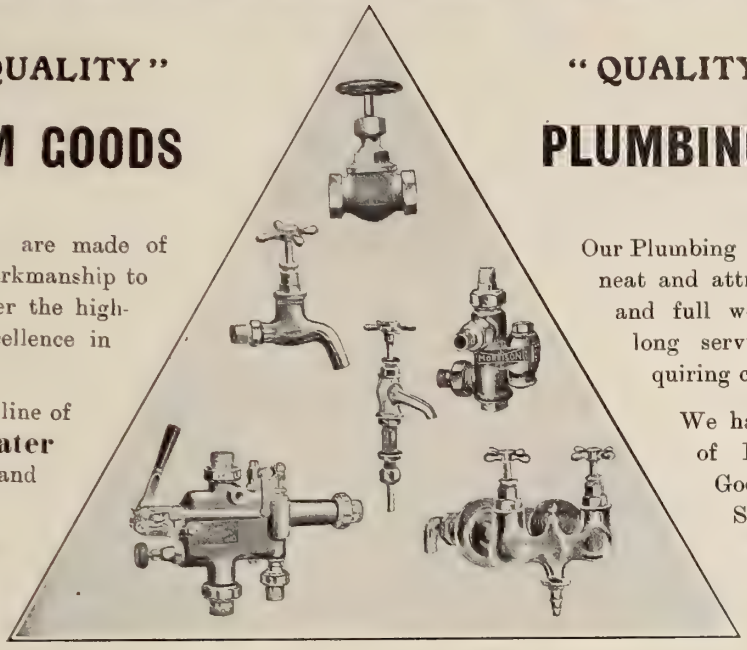
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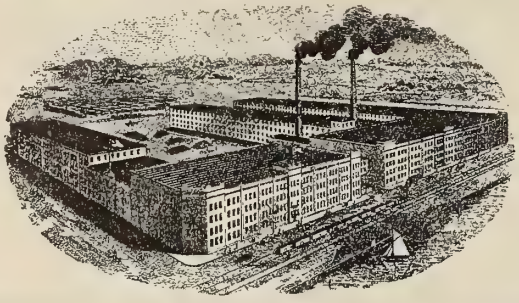
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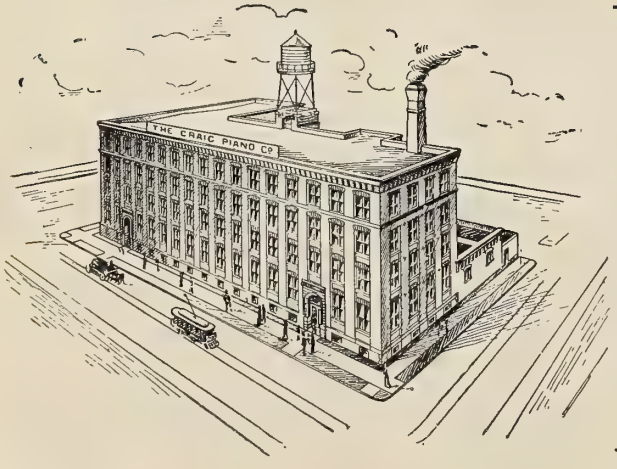
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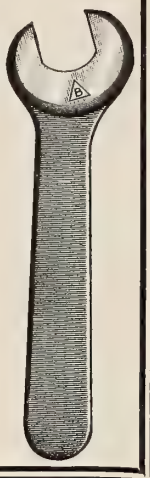
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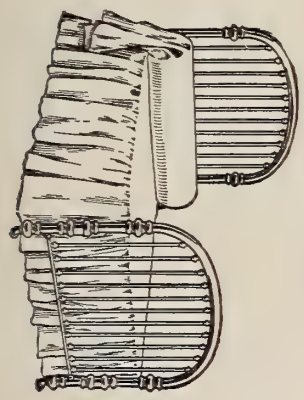
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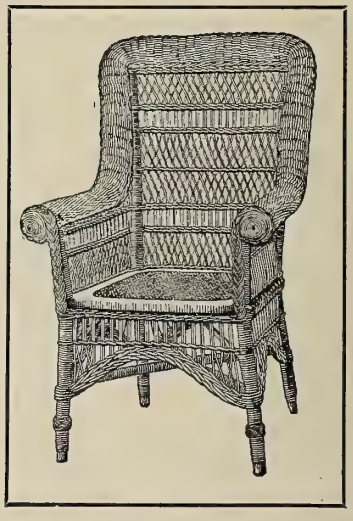
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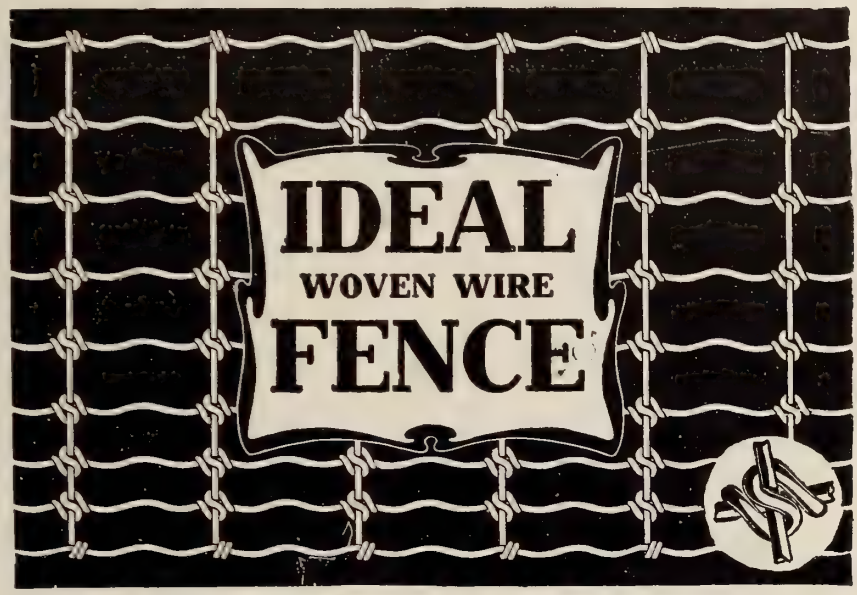
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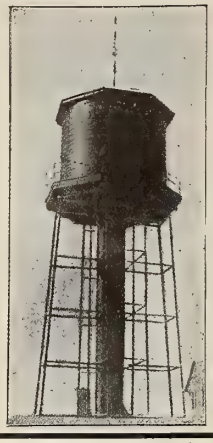
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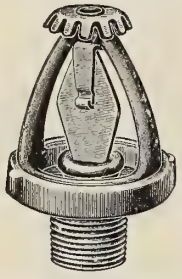
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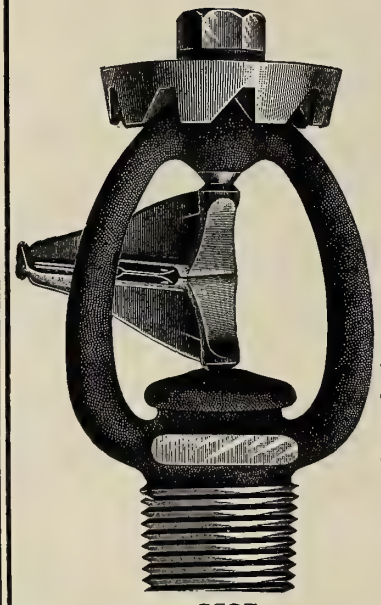
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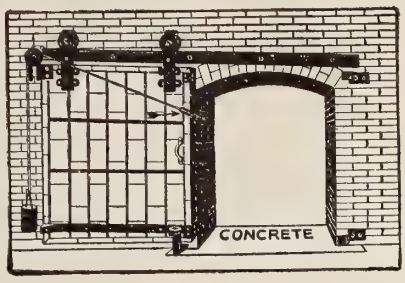
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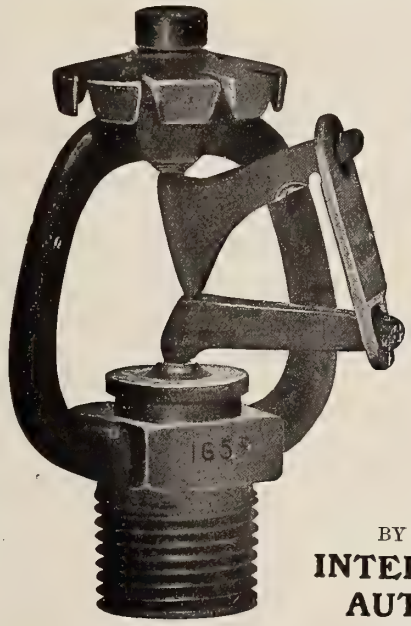
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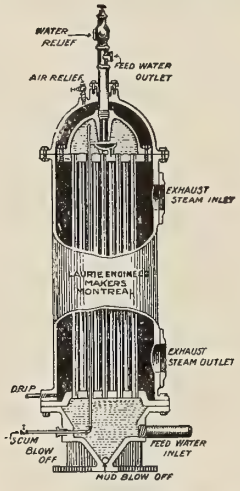
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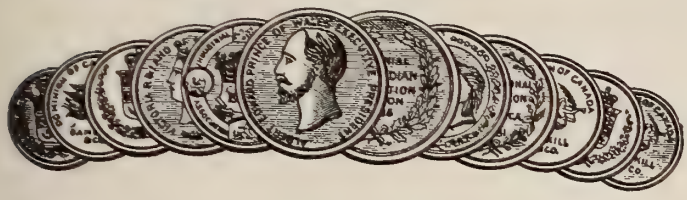
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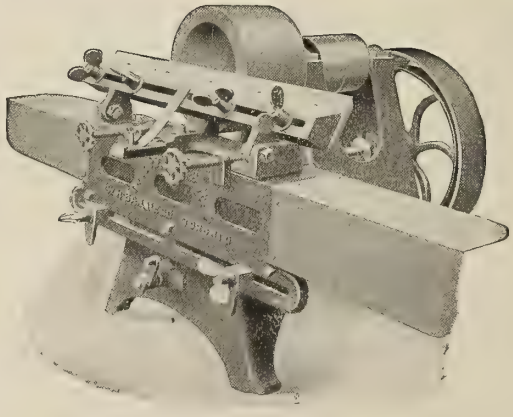
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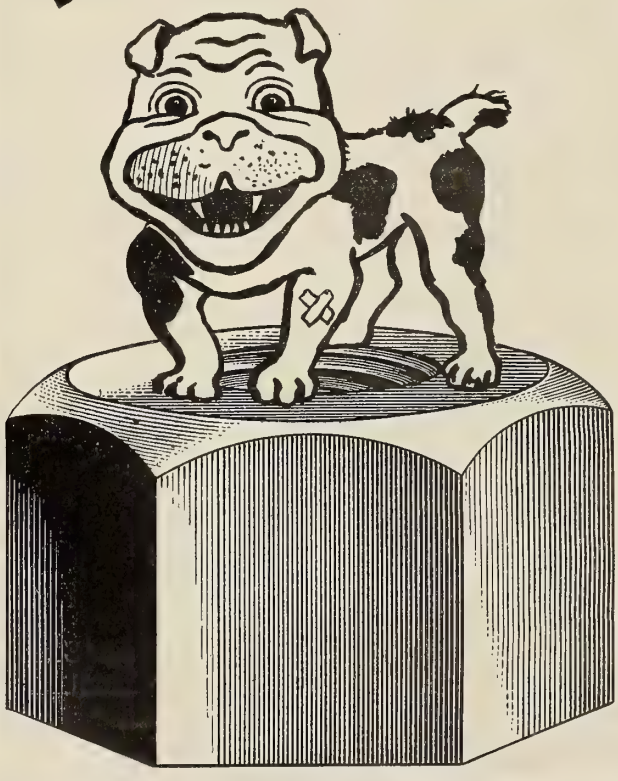
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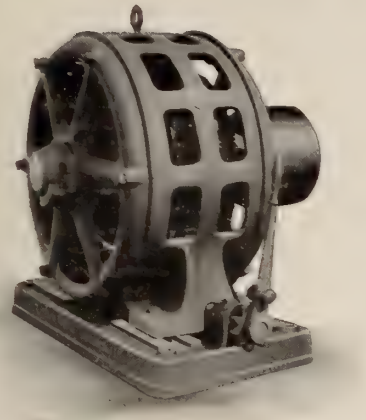
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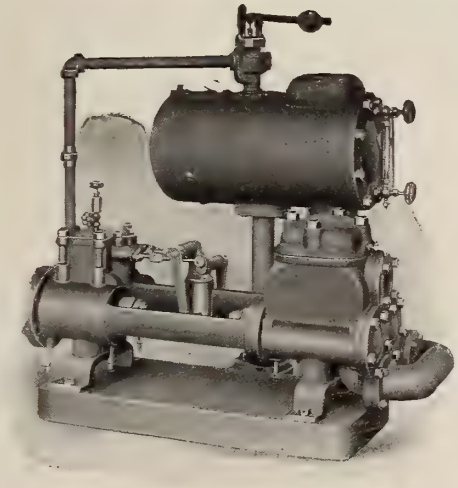
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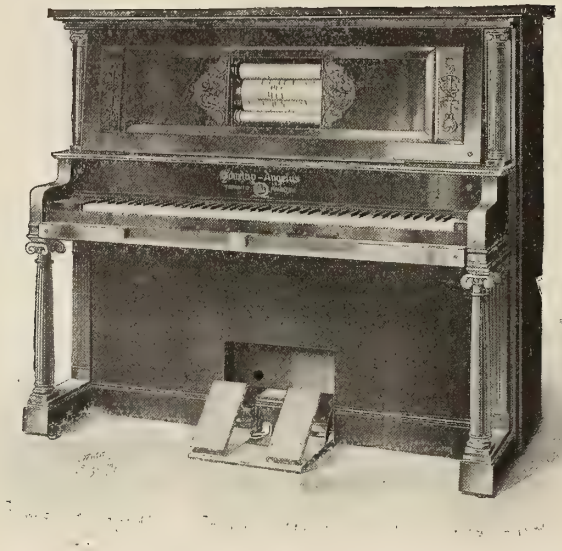
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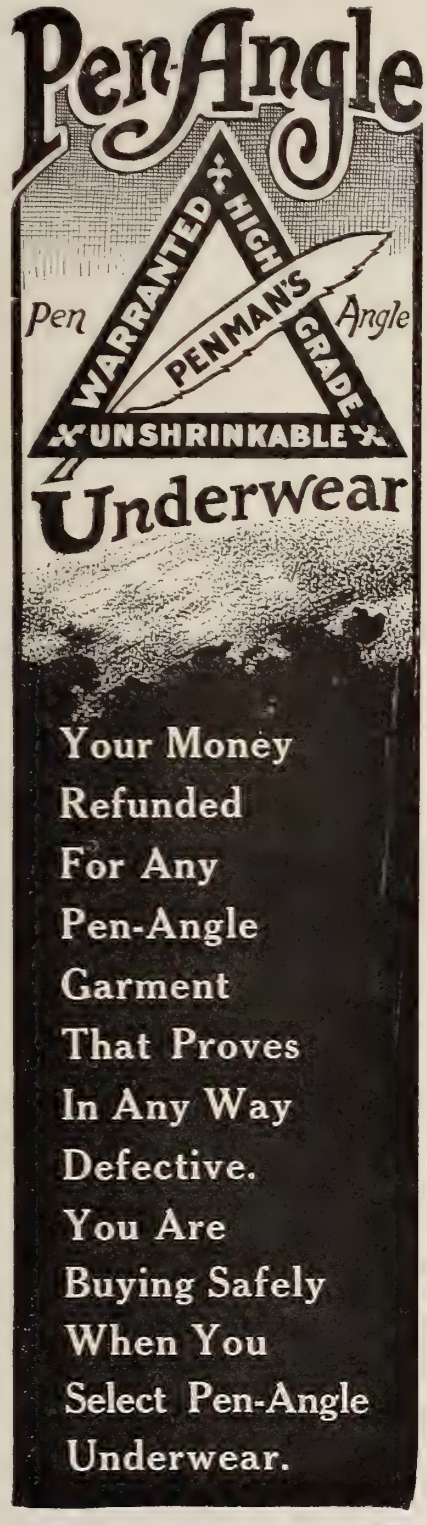
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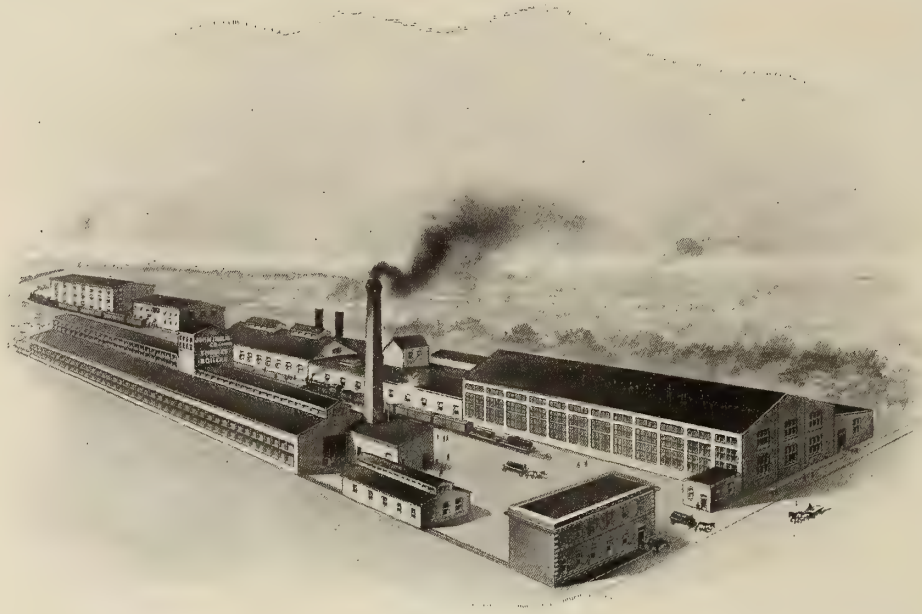
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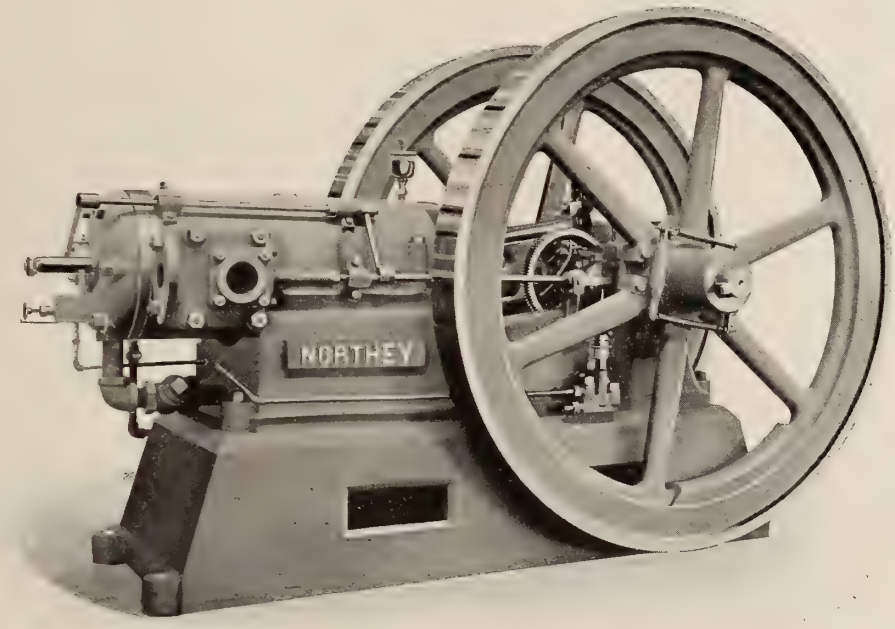
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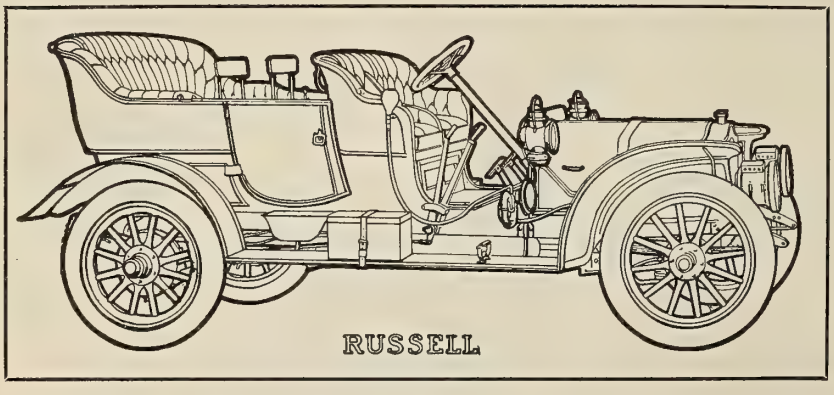
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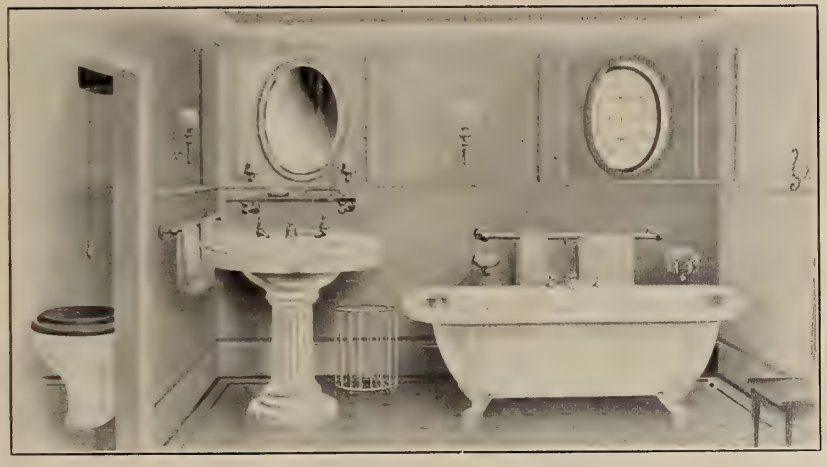
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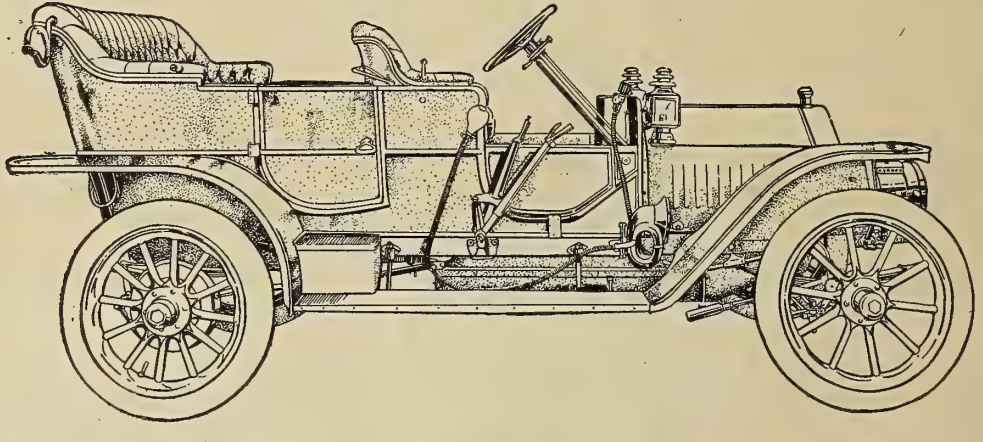
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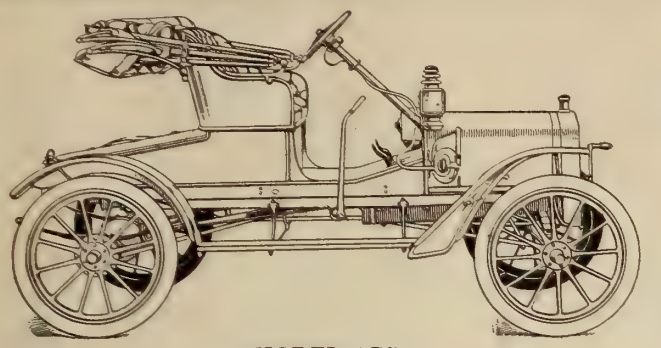
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FORD CARS

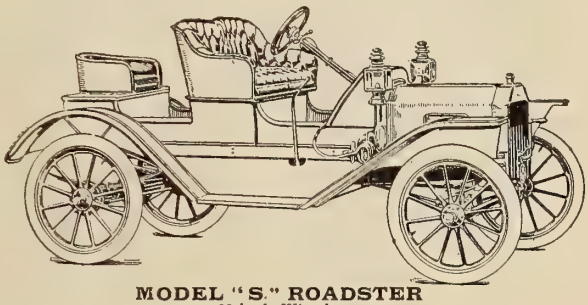
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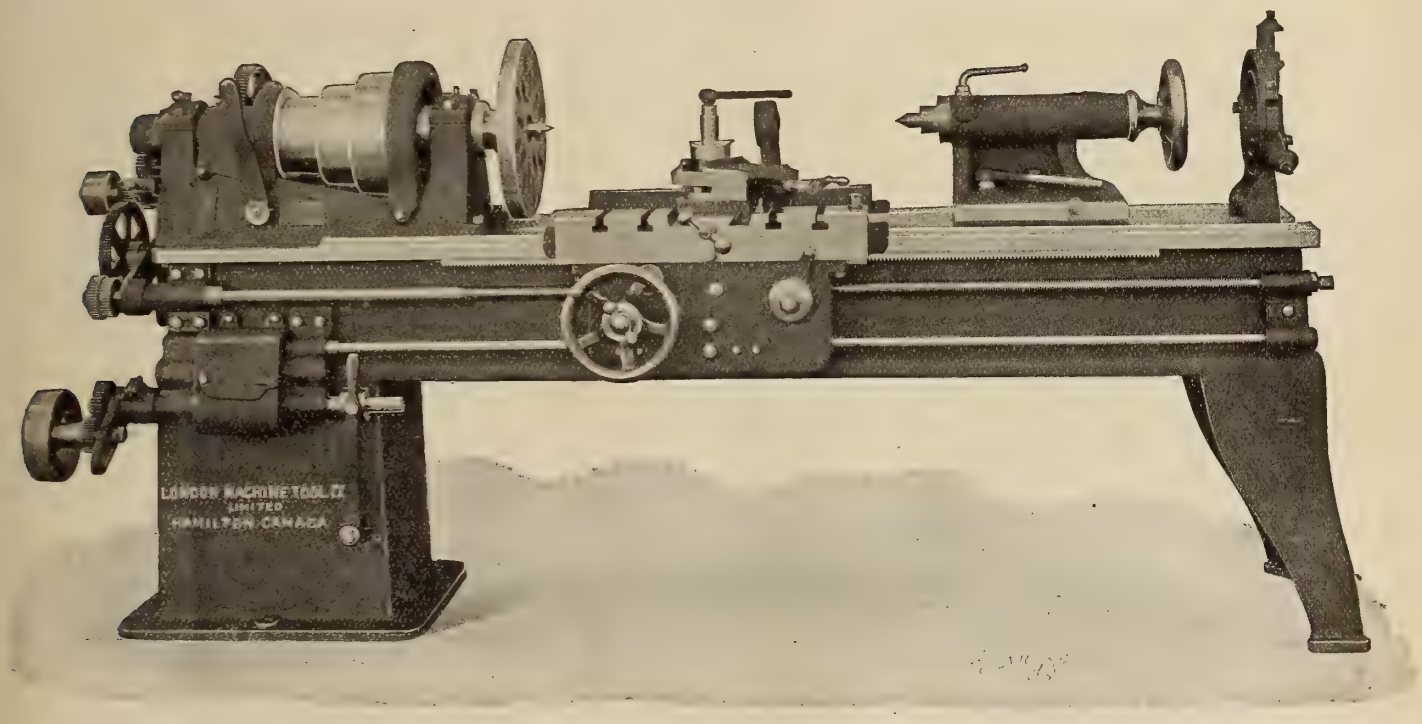
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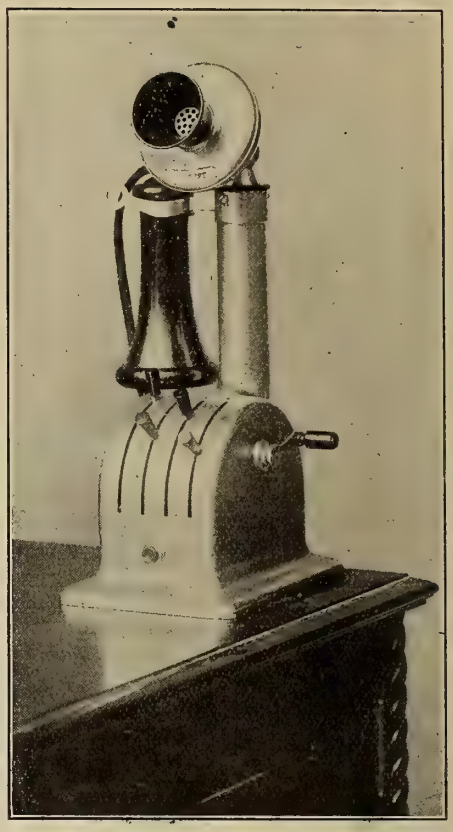
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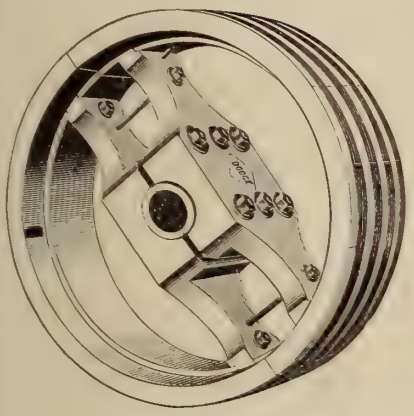
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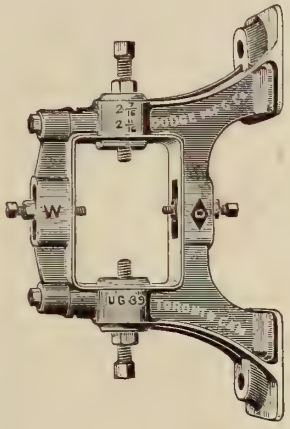
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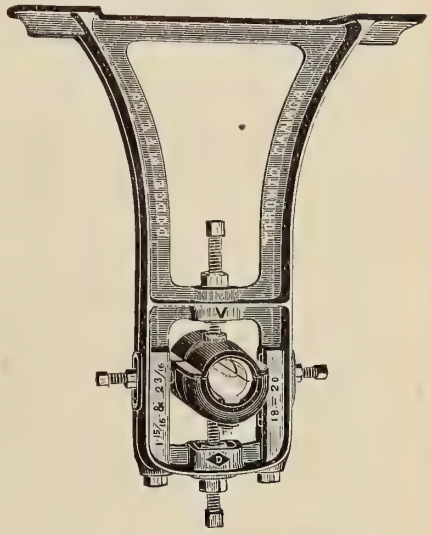
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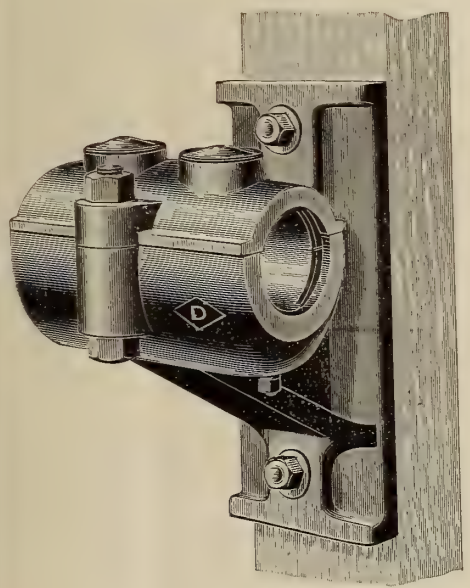
Dodge Wood Split Pulley



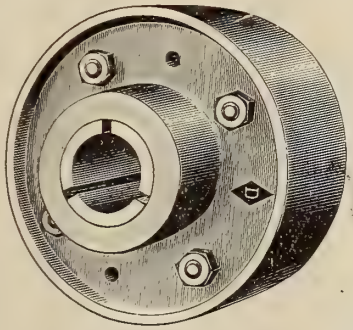
Dodge Universal Post



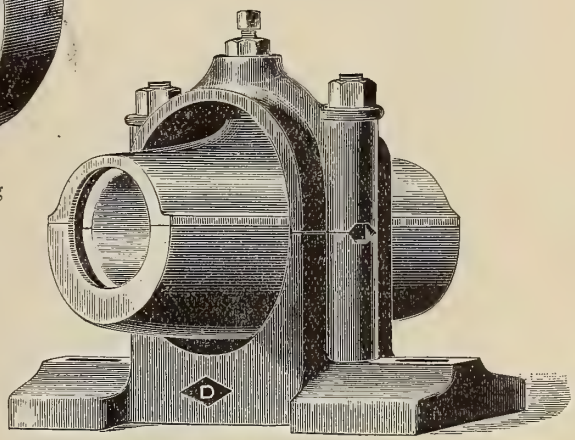
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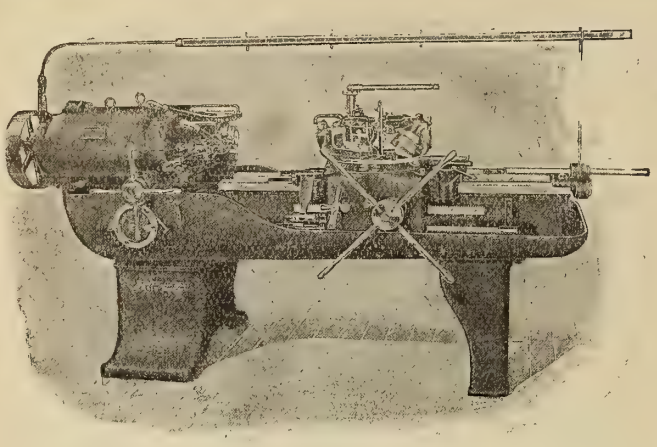


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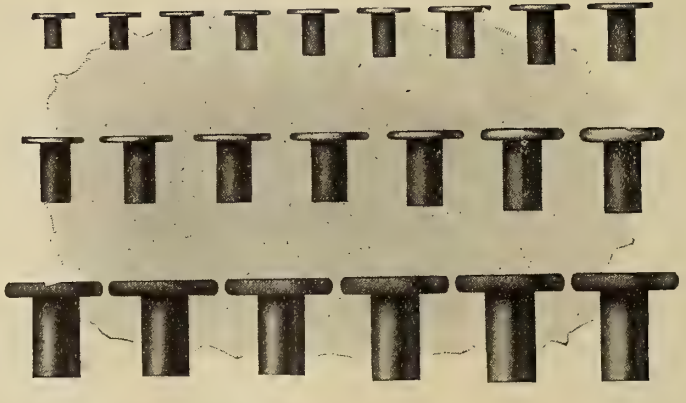
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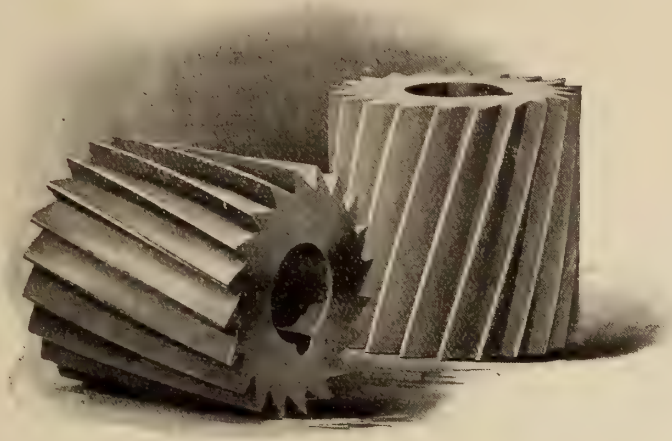
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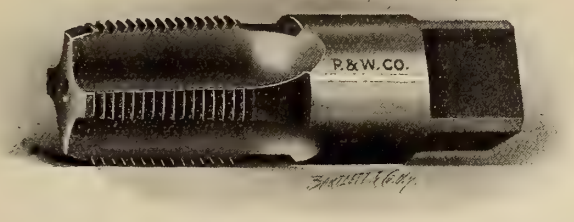
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OF PORTAGE LA PRAIRIE, MANITOBA.

Office of the Secretary:
Twenty Thousand Club and Board of Trade.

Portage la Prairie, Man., June 1908

To Members Manufacturers' Association,
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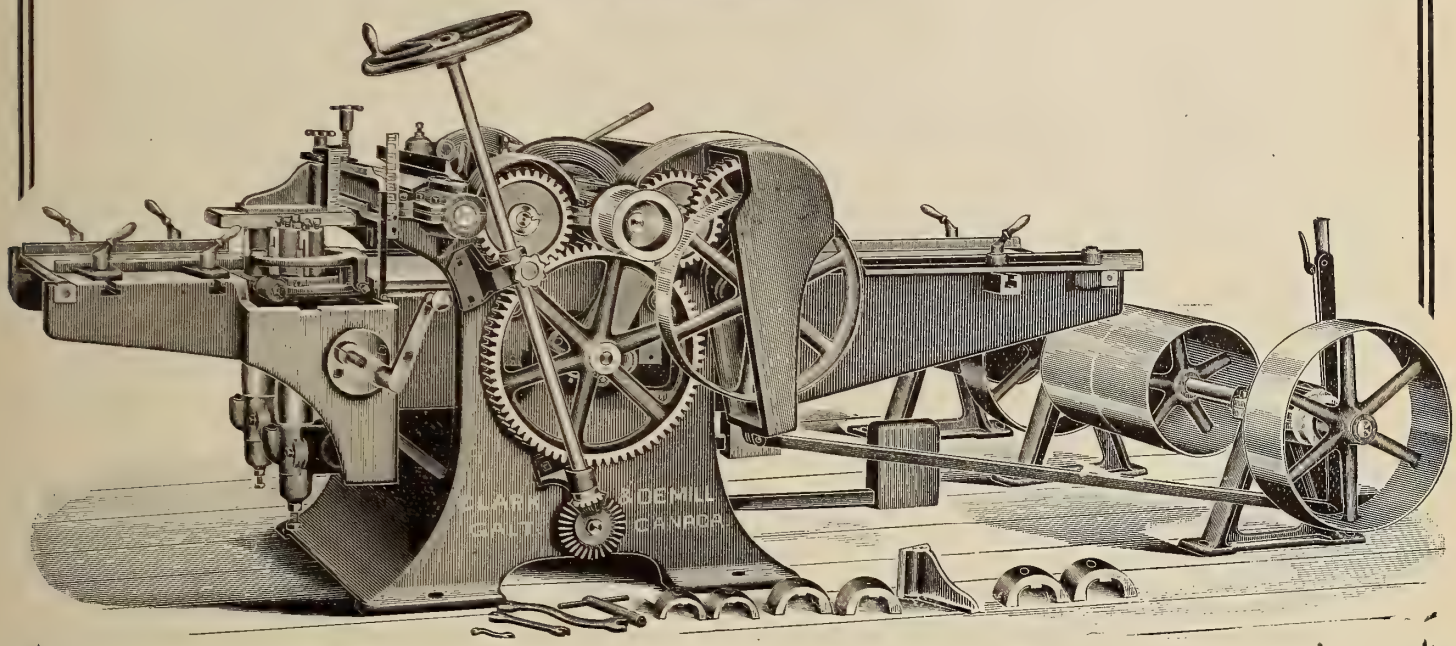
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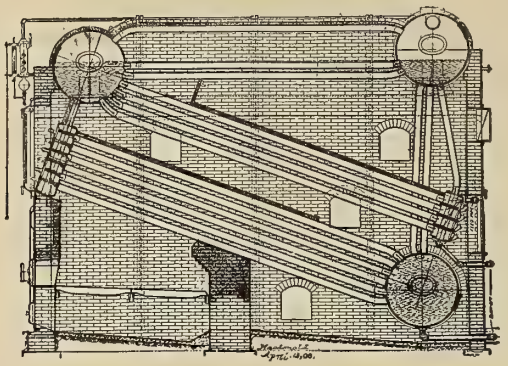
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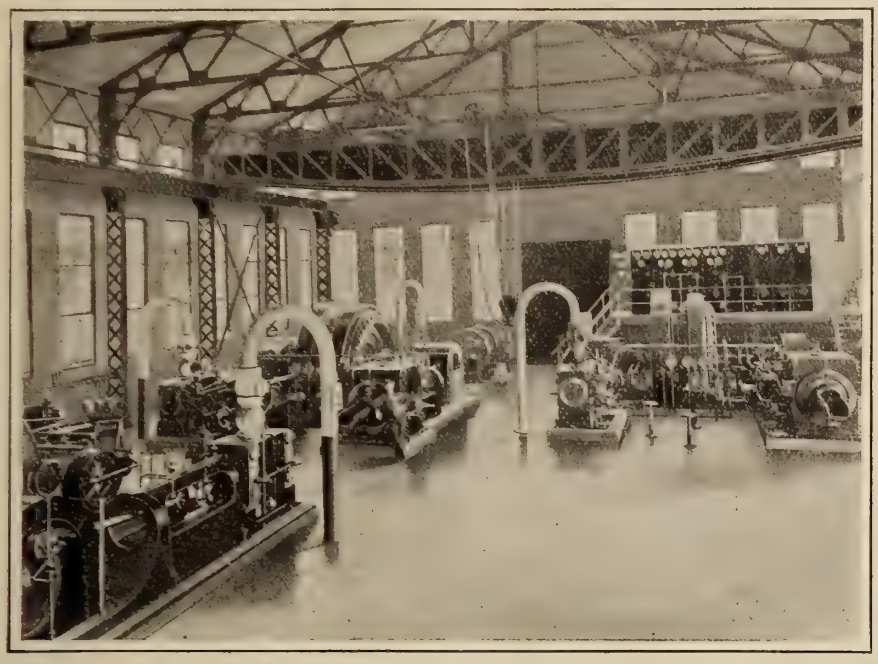
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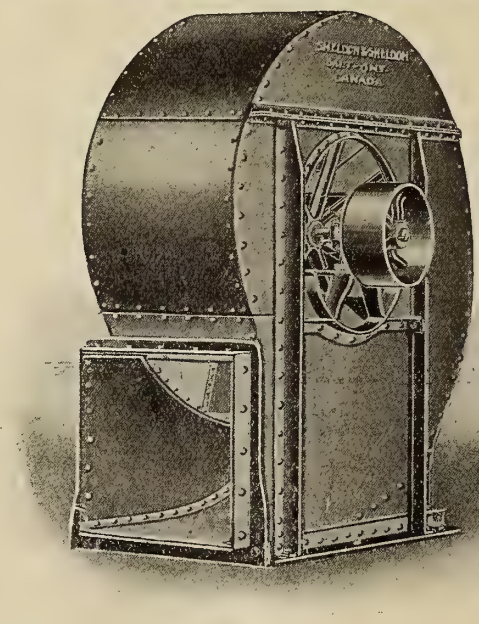
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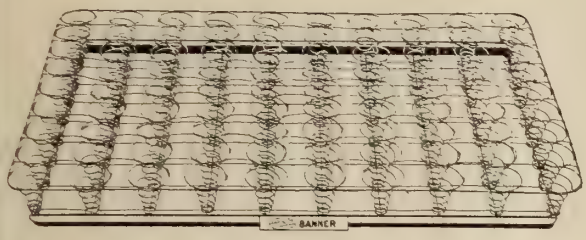
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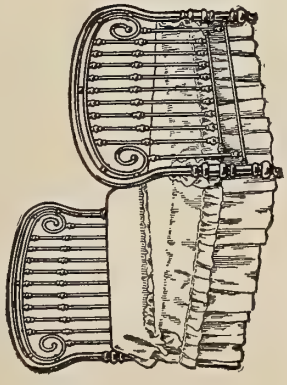
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TORONTO, ONT.

AUG. 29 ***1908*** *SEPT. 14*

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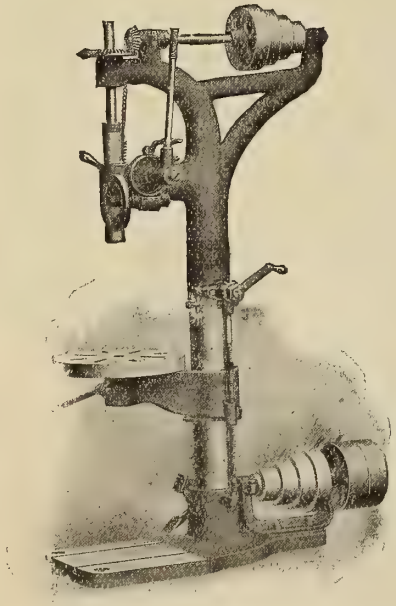
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INDUSTRIAL CANADA

ISSUED BY

The CANADIAN MANUFACTURERS ASSOCIATION.

INCORPORATED.

Vol. VIII. TORONTO, JULY, 1908 No. 12

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

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TORONTO

General Secretary: G. M. MURRAY.
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THE EDITORIAL VIEWPOINT.

A Stern Lesson.

REFERENCE was made last month to the strike then in force among the bricklayers of Montreal, who refused to accept a reduction in wages made necessary by the stress of the times. As was pointed out in the former article, the employers offered to pay the full price demanded to those who were able to earn it, and a less price to less capable men. The union would not hear of this. Every union man was entitled to as much pay for his time—regardless of the amount of work he performed—as every other union man, and the price they named was the highest ever paid to this class of mechanic. Rather than accept any but their own dictatorial terms the union ordered a strike, assuring its dupes that they would be looked after. The International Union, they were told, would pay them for striking. Married men were to receive $10.00 per week and single men $7.00 per week while the strike lasted. It will be observed that when it came to paying wages, the union itself made a distinction between its members. In its view every union man was not as good as every other union man. It was quite proper to demand that the employer pay everybody alike for the "time" they spent on a job; but when it came to pay them for striking, other considerations than mere "time" were taken into account. However, the men were willing to accept from the union terms they would not accept from their employers, and they quit work, happy in the delusion that the union would keep them. When the time came, however, the union failed them. The money was not forthcoming, and want entered the homes of the strikers. For a time the leaders were able to keep them in line with promises and explanations, but all the while hunger was driving home the truth that unionism was, after all, only a rotten reed and could not be relied upon to support them over the crisis. One by one they began to fall away from their leaders and return to their employment. It was a hard lesson, sternly taught, but if they have learned it their time and efforts will not be wholly lost.

The New York Sun on Canada.

IN a recent editorial the New York *Sun* discussed the growth of trade between the United States and Canada. For years the *Sun,* in common with the majority of the United States' papers, ignored us. Canada was a place on the map north of New York State, where the hunting and fishing was good, but for people who enjoyed civilization it was of no importance whatever. Now and again they printed wild yarns of bears running through the streets of our principal cities, and on one occasion, not so very long ago, the writer had the pleasure of winning a wager from the editor of an important New York newspaper, who backed his assertion that Canada was no larger than the State of New York. What a change has come over them! The *Sun* tells its readers that west of Winnipeg there is a thousand-mile strip of fine wheat land. In Western Canada alone there are five million acres under cultivation, and one hundred and seventy-five million acres waiting for the plough and the reaper. In 1897 Canada

took goods from the United States to the value of $72,000,000, and ten years later she bought nearly $187,000,000 worth of United States' products. By 1915, the *Sun* predicts, Canada's trade will exceed $1,000,000,000 annually. The country, it has discovered, is being gridironed with railroads, and business for these lines is made by the arrival of hundreds of thousands of settlers, most of them of the English-speaking race. All these things seem to have come to the *Sun* suddenly, and it is inclined to get excited over it, and tell its people what they must do. It is no longer "The Call of the Wild" it hears, but Wisdom speaking in a loud voice. At any rate, this is how it ends its editorial:

"Wisdom calls to American business men to learn as much as possible about this rapidly developing neighbor, and to demand from their legislators every possible facility for the extension of trade, import as well as export. We have much to gain by a huge reduction in or even the total removal of our present tariff barriers."

Wisdom is doing more than calling to American business men to prepare for the capture of Canadian trade—it is warning the Canadians to hold the trade for themselves. The day has passed when the legislators of the United States can put up or throw down the tariff barriers between the two countries. They can, of course, do what they like with their own line fence, but they cannot touch ours, which is up to remain up. The manufacturers and producers of Canada have not struggled through the pioneer days of this country to have it thrown open to strangers now that it is getting to be worth while. Canada is for the Canadians, and the fact that imports from the United States have grown to such an enormous proportion in ten years, indicates that there are some weak spots in the tariff wall which require strengthening.

The Elections.

THE politicians had the centre of the stage in the Provinces of Ontario and Quebec during the latter part of May and the early part of June. In both provinces the elections turned out as most people expected they would—both governments being sustained. Ontario is overwhelmingly Conservative, and Quebec just as strongly Liberal. The professionals are trying to figure out all sorts of things for the Dominion Government as a consequence, but it is hard to see the connection. The Provincial Legislatures are more local than they are themselves willing to admit, and a great many voters do not take the interest in them that they do in a Dominion contest. It does not make such a great difference which party rules in the province, since their powers are very limited and very local. In the Dominion, however, the government of the day has the power to completely upset the whole course of business and to so change conditions that trade and commerce are disorganized. Fortunately, both the great parties are now pretty well committed to a protective policy, and violent business eruptions are not now to be so greatly feared as was once the case. At best, political contests, whether provincial or federal, have an unsettling effect on the business world while they are in progress, and there is a feeling of relief when they are over. With the campaigns in Ontario and Quebec out of the way, those who engaged in them will be able to get back to their usual pursuits and attend to business.

Nova Scotia and Shorter Hours.

NOVA SCOTIA has appointed a commission to inquire into and report upon the economical effect of a shorter working day with special reference to production, wages, employment, export trade and Canadian industries. This is a pretty large order and a very large subject for a province to undertake. The Legislature of Nova Scotia could not adopt any surer way of killing its industrial growth than by passing an Act to shorten the working day in that province. Every manufacturer in the province would be placed under a handicap as compared with his brother manufacturers in the other provinces, and he would soon be forced out of business or out of the province. No one province of the Dominion can afford to pass legislation of this kind. Nor can the Federal Government undertake it either, for the reason that a shorter working day in Canada would place the industries of this country at a disadvantage compared with their foreign competition. But there are other reasons why the "eight-hour day," of which there has been so much talk in recent years, would be a fatal mistake. The cost to the people of Canada would run into the millions, and the cost of living would become so high that it would be next to impossible for any but the very wealthy to remain in the country. The farmer would be hit so hard by the increased cost of his supplies that farming would cease to be the profitable calling it is to-day. The shortening of the working day would increase the cost of production in our factories all the way from 10 to 20 per cent., and the consumer, both in the city and on the farm, would have to pay it. The advocates of the shorter day say there would be just as much work done in eight hours as there is now in nine or ten hours. The men would work faster and better because they would not have to work so long. They would come to work better rested and more fit to give a good account of themselves. That is all very well as a theory, but it does not work out in practice. It has been tried and those who made the experiment were not long in finding out that they had a loss in production exactly equal to the loss in time. Moreover, in factories where men are employed attending automatic machines, they cannot increase the capacity of the machine because they feel more fit, nor can they lessen its output during the last hour of the present day. There are millions of dollars invested in machinery in the factories throughout Canada, and if the working day were shortened by an hour these costly plants would be compelled to lose a month in time every year, or say about one-twelfth of their capacity. Advocates of the shorter day do not figure on this loss, which would add another large percentage to

the cost of production. It is safe to say that in the majority of cases the manufacturer does not have one clear hour of profit-making in the day as it is, and if an hour were taken from him, he would have to readjust his prices on a higher scale. If such a thing were possible, the manufacturer would like to see everyone living well without working, but as the world is constituted men must work to live and we in Canada cannot expect to live on less work than the people in other competing countries. And if Canada as a whole cannot afford to do less work than the rest of the world, Nova Scotia alone is certainly less able to attempt it.

The Shorter Day and the Farmer.

THERE is another objection to the shorter working day in the cities which deserves special mention, and that is its tendency to depopulate the farms. We have all heard it deplored that the tendency of farmers' sons is to quit the old home and crowd into the cities and towns as soon as they are old enough to shift for themselves. The long hours and hard work on the farm are said to be responsible for this flocking to the cities. The shorter hours and big pay to be made in the cities attract the young men from the plough and the harvest field, and, it might be added, from independence. Is it desirable to place a still larger premium on city life by making the hours of toil shorter and more attractive than at present? The Government pays a premium for farmers from abroad, because it recognizes that the great need of this country is men to till the soil. Would it not, then, be the height of folly to offer a premium in the form of a legalized eight-hour day to farmers' sons to quit the farm and come into the city? In the case of miners working under ground and in a few dangerous and unhealthy employments, there is some excuse for legislative interference in the matter of working time, but in the vast majority of cases it is much better to let the employer buy and the workingman sell labor on such terms as they agree upon between themselves. The farmer can ask what he likes for his hay or grain, and the consumer need only pay as little as he can get it for, and they can deal in it in as small or as great quantities as they like. There is no law limiting them in any way. Why should not labor be bought and sold in the same way? If Parliament passed an Act saying that 1,500 lbs. made a ton worth just as much as 2,000 lbs., it would be as sensible as for Parliament to pass an Act saying that eight hours made a working day just as valuable as nine or ten hours. There are some things that Parliament cannot improve by legislation, and are better left alone. The working day is one of them.

The Decline of the Woollen Industry.



The Sheep: "Baa! What's the use?"

Taxation in Winnipeg.

THERE is a good deal of dissatisfaction with the rate of taxation in Winnipeg. Manufacturers, merchants and others have been appealing for lower taxation and have brought so much pressure to bear on the local legislature to make some improvement in the present system, that steps are now being taken looking to a change. The legislature told the city to appoint a commission and gather evidence covering the whole question, and when they had arrived at what they desired and agreed upon it, it would be embodied in the city charter. One of the arguments in favor of a reduction of taxation is that it would help to build up the industries of the city, and some go even so far as to claim that manufacturers are entitled to special treatment. While we sympathize with the desire of the Prairie City to build up its industries, we think the principle of special treatment in the matter of taxation, whether in the form of exemptions or of fixed assessment, is indefensible. It is manifestly unfair to established industries to grant special favors to new-comers in order to induce them to locate in the city offering these inducements. By the constitution of many of the States of the American Union, and by the laws of many others, exemptions are absolutely forbidden, and in some of the older provinces of Canada the offering of such inducements to

manufacturers is illegal. The practice of granting exemptions is liable to lead to all manner of abuse. Bonuses, tax exemptions and fixed assessments are all the playthings of promoters. The legitimate manufacturer locates his factory at the point most suitable for his business, and would much sooner not have his judgment influenced by the bribery of a municipality. When, however, a municipality offers a special inducement large enough to make it worth while, he is often compelled to locate at some less desirable point in order to forestall competition that would be ruinous to both. In starting out Winnipeg should begin right, and it should not accord to any individual, or any class, treatment which it is not prepared to give to all alike—the old established industry as well as the newcomer. It strikes us that the real trouble in Winnipeg is a heritage of the boom. Land values of a few years ago reached a height that made visitors from the older parts of Canada gasp in astonishment. Assessments based on these values and still in force are, no doubt, burdensome, and should be readjusted. To go further than that in the direction of getting legislative sanction for the granting of special favors in the form of exemption or fixed assessment to be offered as inducements to manufacturers to locate in the city, would be a mistake, and one that the city would regret in the future. All the city wants is an all-round reduction in assessment. Certain lines of manufacturing would thrive better in Winnipeg than in any other city in Canada, and these it will get in good time and without bribery; meanwhile it should not offer inducements to promoters that it is not prepared to give to those already established, and to all who may later on come in to compete with the favored ones.

The Coasting Laws in British Columbia.

THE coasting laws of Canada provide that goods shipped from one Canadian port to another port in Canada must be carried in British bottoms. This is the law in general; but a special privilege was granted in so far as British Columbia ports were concerned, which permitted goods shipped in bond from points in Eastern Canada, over American railroads to Seattle, being carried the balance of the distance in foreign vessels. The reason for granting this privilege was that it gave the people of British Columbia the advantage of competition in railway rates. When the Canadian Pacific was the only road entering British Columbia, these special coasting privileges were valuable, as otherwise the people would have no alternative, as there were not enough of British Columbia boats to carry on the trade. Now, however, there are two other lines of railway entering the province, and the new transcontinental will be there in a comparatively short time. The situation is therefore changed, and the time has come for the repeal of the special coasting privileges, and the application of the same regulations as obtain in the other ports of Canada. Besides there are now more British bottoms available, and many vessels ready to be transferred to the service as soon as the present privileges are cancelled. The foreign vessels that carry on the trade under the present ruling are mostly American, and outfit at the American ports. This means a heavy loss to Vancouver merchants, who would get the bulk of this trade if British vessels were placed on the route. Besides, when the Grand Trunk Pacific gets into operation to its Pacific terminal, the trade offering between that port and the other coast cities and towns of British Columbia is bound to be important, and it should not be allowed to fall into the hands of foreign vessel owners, who purchase all their supplies outside of Canada. The people of British Columbia feel that the time has arrived when the coasting laws in force in other parts of Canada should be put in operation on the Pacific coast.

The Tin Plate Industry.

A PECULIAR and somewhat embarrassing situation has developed with regard to the manufacture of tin plate in Canada. The tin plate factory recently established at Morrisburg is making demands on the Government for the enforcement of the dumping clause against their United States rivals, and they seem to have a good case. United States manufacturers are selling tin plate in Canada at 70 to 80 cents a box less than it can be bought for in the United States, and as this is a direct violation of the Dumping Act, it would seem that the Canadian manufacturers of tin plate are within their rights in the demands they are making. On the other hand, the tin plate manufacturers of Wales, the home of the tin industry, are selling their product in Canada in competition with the slaughter prices of the Americans, and making a profit. Enforcing the Dumping Act against the United States would, therefore, result in the Wales manufacturers putting up their prices, which are already high enough to enable them to do a profitable business. The users of tin plate in Canada, who include all our canning factories, would have to pay higher prices for their packages once United States competition in the market was removed. Before the Government consents to the application of the Dumping Act against the United States it should be satisfied that the Morrisburg plant is manufacturing in substantial quantities, otherwise the users of tin plate will be at the mercy of the Wales producers. Should this occur as a result of the enforcement of the Dumping Act, and the inability of the Morrisburg people to meet the demand, the Government would have to come to the rescue of the users of tin plate by increasing the protection on their products. The situation is certainly a peculiar one, and will have to be handled with great caution. In the opinion of a great many, Canada is not yet ripe for the establishment of a tin plate industry, as the demand in the country is scarcely such as would justify the operation of a plant on a sufficiently large scale to make it profitable at a reasonable price for its products. Industries that come ahead of their time should not ask

to be supported at the cost of those already established. This is more particularly true of an industry that has to import its raw material. Everyone who has the future welfare of the country at heart should be willing to make all reasonable concessions to such industries as are natural to it and aid in the development of its latent resources. The canning industry is of the utmost value in furnishing a ready and profitable market for the products of the farm and of the fisheries, and it should not be handicapped for the benefit of the tin mines of Wales.

The Canadian New Zealand Steamship Line.

OUR New Zealand correspondent, whose letter appears in another part of this issue, calls attention to the fact that the contract for the steamship service between Canada and New Zealand runs out in a few months, and he has been informed by the Premier and the Minister of Marine of the latter colony that the question of its renewal has not yet been considered, but that it will not be continued on the present basis. He says that commercial men generally are of the opinion that the line will never pay unless a monthly service, with regular sailing dates and at least 500 tons of refrigerator space is established, and the rates will have to be reasonable. He points out that a larger subsidy will possibly be necessary to secure an efficient service, but, as he truly remarks, it is much better to pay a little more for an efficient service than to continue the smaller amount for a service utterly unfit for the trade. There is a profitable trade to be had by a line properly equipped with refrigerator plant, and there is no reason why such a line should not be provided. If we are to extend our trade with our sister colonies, we must have proper transportation facilities. An inefficient line is as bad, if not worse, than no line at all. Paying a subsidy, however small, to a line that does not meet the requirements is a waste of money. The subsidy should be made sufficiently large to ensure an efficient service, which, judging from what our correspondent has to say of the trade prospects, would soon result in a respectable volume of business being done between the two countries.

Through the Rapids in Safety.



Jack Canuck: "Well! we're past the bad spot and there's no damage to the canoe."

Patent Rights in England.

THE British Government has made a ruling regarding patent rights in Great Britain which will have a far-reaching effect. Henceforth, in order to protect a patent in Great Britain the holder of it must establish a factory for the production of the article thus protected within the United Kingdom. It is understood, however, that the colonies are to be exempted from this regulation, so that the production of any patented article in any colony where it enjoys patent rights will serve as a protection for these rights in Great Britain. That is, if the article is patented both in the colony where it is produced and in Great Britain, its manufacture in the colony will be sufficient to protect the British patent. It is said that between twenty-five and thirty millions of pounds sterling are already going into new plants in Great Britain in order to protect patents there. The new regulation should prove a great help to certain lines of Canadian manufacture.

The Woollen Industry.

THAT the Preferential Tariff is killing off the woollen industry in this country is only too painfully apparent to all who have taken the trouble to compare what it was before the adoption of that tariff with what it is now. In 1900 there were 157 establishments in Canada employing five hands or more. These were capitalized at $10,486,198 and employed 6,795 hands turning out products to the value of $7,359,541. Five years later, in 1905, the number of establishments had been reduced to 103, the capital to $6,808,233, the employees to 4,587, and the value of the product to $5,717,735. When this falling off in the woollen industry is compared with the rapid in-

crease in the population of the country, amounting to 35 per cent. in the twelve years from 1896 to 1908, it becomes more impressive. If an industry that stands still in a growing country like Canada is considered to be going behind, what, then, is to be said of an industry that goes behind at about the same rate as the country goes ahead? It is certainly dying out. As to the cause we have only to look at the record of woollen imports to discover that the Preferential Tariff is the blight that is killing off our woollen industry. The value of woollen manufactures imported into Canada in 1897 was $7,094,909, and ten years later, in 1908, they had increased to $21,213,234, an increase of $14,118,325, or 199 per cent. To further illustrate the effect of the preference, compare the prices of wool and of the finished product both before and after the Preferential Tariff went into effect. In 1898 English blankets made from wool costing 14 3-10 cents per pound sold in Canada for 35 3-8 cents per pound, and in 1907, under the Preferential Tariff, English blankets made from wool costing 23 1-2 cents per pound sold in Canada at 30 1-8 cents per pound. These figures do not call for any comment. They tell too plainly the story of why the woollen industry of Canada does not prosper as it should prosper under fair conditions.

The Port of Montreal.

THE agents of the ocean steamships in New York have been hard hit by the general depression in the freight traffic to Europe. The laying off of five freight steamers by the White Star Line in June was attributed in a large measure to the diversion of grain shipments from the port of New York to that of Montreal, and the reason for this diversion makes interesting reading. It is all a matter of cost and the Montreal route is the cheaper by nearly 3 cents a bushel, due to the fact that our unrivalled canal system furnishes an all-water route for grain shipments all the way from Duluth to the seaboard, whereas the bulk of the grain exported via New York has a rail haul from Buffalo to that port. The agents point out that the rate from Duluth and Fort William to New York via Buffalo is 7.40 cents, which includes delivery free on board the steamers. The rate from the same points of shipment, free on board, is 4 1-2 cents a bushel, and from Toledo to Montreal 3 3-4 cents. With this advantage in Montreal's favour it is useless to expect that shippers will bill their goods via New York. A few months ago we called attention to the great economy of water transportation, and pointed out that the Government would be justified in going to almost any expense to develop and improve our waterways. Here we have the very strongest kind of proof of what cheap water transportation can and will do for the country. The Americans are going to spend an immense amount of money on the Erie Canal to bring it up-to-date, and when that is done Montreal's advantage will certainly not be so great as at present, if there is any advantage at all. While our friends across the line are improving their Erie Canal, however, we can, if we will, put them at a still further disadvantage by constructing the Georgian Bay Canal, which would shorten the distance between Chicago and Montreal by about 800 miles, avoid the dangers of lake navigation and cut down the present freight charges to a figure with which it would be impossible for any other route to compete. Nature has given Montreal an advantage as the ocean port for the great West, both American and Canadian, and the fault will be our own if we fail to profit by our position.

The Voting Power of Unionism.

THE National Association of Manufacturers of the United States has issued some figures which show what a myth the so-called "labor vote" in that country is, that is the "labor vote" as represented by unionism and paraded by noisy demagogues to frighten timid politicians. It is pointed out that there are 32,000,000 wage earners in the United States, and the total membership of the American Federation of Labor, according to its own showing in its latest report, is only 1,538,970, and these include women and children as well as men, and aliens as well as voters. A large number of the names on the rolls are those of workers who reside and work in Canada. In short, when the "labor vote" with which unionism threatens politicians is analyzed it fades into insignificance. As we have often pointed out, the same is true in Canada.

Refused the Farmers Protection.

A DEPUTATION of farmers from the district of Montreal waited on the Government last month and asked that the duty on pickles be raised to a figure which would afford them some protection against the cheap Dutch, French and German vegetables which are being shipped into this country in tons under the name of British Pickles. The duty against vegetables, as vegetables, is 40 per cent., which prevents the Canadian manufacturer importing the cheap ones; but when they are shipped into England free and pickled they come into Canada at a rate that figures out under the preference at about 15 per cent. The result is that Canadian pickle manufacturers cannot stand the competition, and pay the price which the Canadian grower has to get for his vegetables, and the farmers realize that something must be done or their market will be gone. They placed the matter before Sir Wilfrid Laurier and his colleagues, but he has refused to do anything for them. The manufacturers, while they will have to suffer some loss, will be able to find some other use for their capital and their factories, but the farmers will have a hard time finding use for their land which will bring them anything like the same returns. Some farmers in the vicinity of Montreal got as much as $4,000 a year from their vegetables, and they naturally feel that they are entitled to a fair measure of protection against the farmers of Holland, France and Germany.

D. M. COUGHLIN.

THE BUILDING SITUATION.

Prospects for building operations. The cost of building is twenty per cent. less now than it was this time last year. Indications are that the low level has been reached. High money rates retard operations. Other conditions are favorable.

THE cost of building has decreased materially since this time last year. Tenders of contractors are now 20 per cent. lower than on similar work at this time last year. A number of elements are responsible for this reduction. First, there is the price of material, which has suffered a decided drop. Only the materials which go into the construction of houses are of real interest at present, since the general policy of a curtailment of expenditures among manufacturers has resulted in practically a total cessation of construction work in the line of factory or warehouse extensions.

In the class of buildings which are being tendered on, brick is the most important material. A year ago brick cost twelve dollars a thousand. Now it can be bought at $9 to $9.50 per thousand. This represents a reduction of between 20 and 25 per cent.

Lumber has also shown a noticeable reduction, though not so much as brick. A year ago it sold for $32 per thousand; now it can be procured at $28 per thousand. This represents a decline of over 12 per cent. Building hardware, consisting of locks, handles, and fixtures of various kinds, has also dropped in price. During the year prior to May, 1907, there were a number of sensational advances in this class of building equipment. At short intervals of a few months four different advances of 10 per cent. were made, making the cost of these materials over 40 per cent. higher within the year. This high cost has dropped about 10 per cent. up to the present time, which, while it shows up well in comparison with the prices of a year ago, is still very high compared to the prices quoted in the spring of 1906.



Members of the Association were entertained at the Commercial Club in Hamilton during the Convention last September. In commemoration of the event which marked the opening of the Club, the Association has presented a brass tablet, a miniature of which is shown above.

The cost of labor is almost if not quite as important as the cost of material. In spite of the slackness of work this year there has been no apparent reduction in the price of labor. There has, however, been an actual reduction, in that more work is being accomplished for the same price. The rate per hour has remained unchanged. The amount of work done in the hour has generally increased.

This condition is experienced in all times of industrial depression. When only a portion of the available supply of labor is employed, employers can pick out the most competent and efficient. The advantage of having only the best of mechanics is added to by another consideration. Where a man knows that someone else is waiting to step into his position, he immediately takes thought how he can do his work so satisfactorily that he will hold his place. If in quality or quantity he falls down, he knows he will be dropped and one of the unemployed will be taken on in his stead.

This condition has developed this year. The shortness of work which began at the close of last year and has continued, though with decreasing severity, up to the present, has resulted in a distinct improvement in the quality of labor supplied. An estimate by a prominent builder places the increased efficiency resulting from this source at 10 per cent.

The Important Elements.

The contractor bases his tenders on three conditions. He figures on the price of material, the price of labor, and the demand for buildings. The first two are external to himself and cannot be controlled by him. He knows approximately how much material at a certain price, and how much labor at a certain price, will be required to erect the building. He cannot accept less than the sum of these two for the job. How much more than the sum of the two, that is, how much profit, he can get for himself, is determined largely by the third consideration. If there is a large amount of building going on, and the contractors are busy, they will tender high. There is plenty of work to go around, and if they miss one job they will get another. The law of supply and demand is in operation. Thus last year contractors wanted a good percentage of profit. This year there is a small volume of building going on and consequently there is keener competition for it. Contractors will accept a smaller percentage of profit. Hence the cost is reduced to the man who is having the work done.

As a result of these conditions buildings are being erected for 80 per cent. of what similar work cost a year ago. Indications now are that the cost has reached a minimum. There has been no further decline since the beginning of May, and now there is a distinct increase of interest by intending builders. This is shown by the numerous enquiries which are coming in to the architects' offices and the greater amount of work which is being actually done. While the latter does not bulk very large yet, it is sufficient to strengthen prices and to prevent any further decline. There is no likelihood of the cost of building advancing this summer, but the brighter prospects in construction work will successfully prevent any further decline.

Slowness on the part of the public to take advantage of present prices is largely the result of high money rates. The majority of houses are put up either by speculative builders or by men who are prepared only to put up a portion of the cost in cash. For some years there was no difficulty in getting accommodation at reasonable rates. This year it is so difficult to raise money on real estate or buildings, and the interest is so high, that intending builders are scared off. An easing in these conditions should result in a considerable amount of building.

The Wallaceburg, Ont., Sugar Co. will spend $40,000 this year on improvements and extensions to their plant.

FILING SYSTEMS FOR GENERAL OFFICE USE.

By D. P. Cruickshank,
General Manager Library Bureau of Canada, Ltd.

When a subject comes up for discussion or review, all correspondence and papers bearing on it are wanted. They are not only wanted, but they are wanted at once and in one file. By means of vertical filing folders this result is accomplished efficiently and economically.

WITHIN the last ten or fifteen years, business methods and office equipment have been struggling through a period of revolution. The amalgamation of interests of various manufacturing concerns, and the consolidation of commercial houses have forced every man, in order to keep pace with the times, to look about him for better methods to carry on the internal routine of his office. Men have spent hours in scheming and planning labor-saving devices, and new ones are being discovered every year. No doubt, most



How the vertical filing system is operated.

important next to the typewriter is the system of filing papers vertically; on end—not flat. To those who have not adopted this system, the above may seem a broad statement, but explained by the following description the uninitiated may be convinced.

The fundamental principle of Vertical Filing is to reduce the classification of papers to a unit basis. That unit may be either represented by a number signifying some name or subject, or the name or subject may become the unit itself.

A brief description of the numerical system will illustrate the point. Tough manilla folders of uniform size are numbered from 1 upward and filed numerically. In each folder all letters *to* and *from* one correspondent or conecrning *one* subject are placed in order of date; those of the latest date in front. Guide cards with projecting tabs are inserted between every ten folders to facilitate handling. To this numerical arrangement of folders, a card bearing name or subject is filed in an index tray alphabetically; one card for every name or subject, and once made out serves as an index forever. The index has great additional value as a complete list of addresses of all persons or firms with whom business is transacted. Then comes the chance for cross referencing. A letter covering more than one name or subject is filed in a numerical folder under the most important. Cards are then made out under as many names or subjects as necessary, and are filed alphabetically, but all referring, however, to the one numeric folder. By this means any letter may be located, no matter whose name it bears or under what subject it has been filed. One folder wanted is thus lifted from the file without disturbing the others.

So far, we have only dealt with a numerical file, but, as previously stated, the name or subject may become the unit, and by this is meant the alphabetical arrangement. No card index is used. All letters pertaining to one name or subject are grouped in one folder, on which the name or subject is plainly written, and dropped behind the proper guide. These guides bear the letters of the alphabet, subdivided as required.

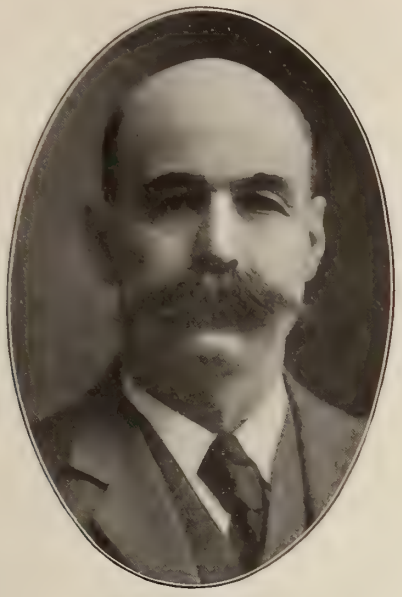
Compare this modern rapid-fire method with the old style of searching through letter books, hunting up pamphlet boxes, wading through flat files. There is only one possible place to file a letter, and only one place to look for it. Any single name or entire correspondence to or from any firm, or the complete history of any transaction, laid before you in proper order instantly, all in one compact unit folder.

How to File Catalogs.

Carry this general idea into your purchasing department. Arrange your catalogs in numerical order; then with your card index you can put your hand on the catalog of any firm or look up the price of any article instantly. All the catalogs of one firm can be brought together under one number, or all articles of one line can be classified accordingly. This system not only provides an index to the catalogs, but to every important subject and article in each catalog. A card record filed by name or article can be used to collect and classify quotations from various vendors. Here the card acts as the unit on which the story about each article is told. This, however, is getting down to a discussion of more complicated systems which need individual study, and the writer was asked to make this article general.

One or two other suggestions manufacturers in the Association may find of interest. Credit reports may be filed numerically, and the cards used as a summary of important information taken from each report. At a glance, then, you can size up the standing of any man or firm.

Duplicate invoices filed by account number bring together all the dealings you have had with any party, showing date of purchases, articles sold, and amounts. The whole story is in one neat folder without going to the ledgers, order books or correspondence file. Requisitions, vouchers, cancelled checks, freight receipts, in fact any paper or collection of papers in an office can be arranged, classified and handled with less cost, less space, less worry, by adopting the Vertical Filing System than by any other means.



Mr. J. B. Tudhope
Whose election adds strength to the new legislature



Hon. Adam Beck
A member of the Association who has a place in the Cabinet of the Ontario Government.



Mr. W. F. Vilas
A member of the Association who was elected to the legislature of the Province of Quebec.

MANUFACTURERS IN THE NEW LEGISLATURES.

MANUFACTURERS have played a prominent part in the deliberations of the Ontario Legislature during past sessions. It is satisfactory to know that the new Parliament will contain men who in the past have shown their ability to initiate measures of the utmost benefit to the people of the Province, and new members whose business careers mark them out as fit associates of those who were already there.

In the last Legislature there was no more interesting figure than Hon. Adam Beck, whose popular title of Minister of Power, indicates in a phrase his particular sphere of activity. When the Cabinet slate was made up on the accession to office of Mr. Whitney, Mr. Beck appeared as a Minister without portfolio. In other words he had to carve out a line of work for himself. This he succeeded in doing with a success which has seldom fallen to men in similar position. With all the chief fields covered—agriculture, finance, forests and mines, public works—it would indeed appear that nothing remained but the always thankless task of offering general advice. But as a manufacturer, Mr. Beck recognized the importance of power, and the possibilities of a cheap hydro-electric supply. He made this field his own. What he has accomplished already is known to all. What the investigations which he set on foot will accomplish in the future will be the measure of his sucess. By the policy which he inaugurated the water powers of Ontario will remain the property of the people of Ontario, to be developed in the manner which will best bring about the desired end of cheap power.

Mr. W. K. McNaught has been for years so closely connected with the Canadian Manufacturers' Association that his career in the Legislature has been watched by the members of the Association with particular pride and satisfaction. The time and ability which he has brought to the service of the Province have resulted in his initiating much new legislation, and in tempering and improving many acts which contained in their original form elements that might have proved dangerous to the welfare of the Province. So wise and straightforward was his course throughout the life of the last Parliament, that he attained a position approximating to that of a Cabinet Minister in the public estimation.

It would be impossible to review in detail the legislation with which he has been associated. When the power question was up for discussion in Toronto last Fall, however, he was the most effective exponent of the government policy. His work at that time was particularly arduous, his self-imposed duty impelling him to carry on a campaign of speech-making which was not limited by any means to one address an evening. He is a member of the Hydro-Electric Commission and has had the satisfaction of seeing the policy of the Commission seconded by most of the municipalities interested. Mr. McNaught was returned practically without opposition at the recent elections.

Mr. J. B. Tudhope, who will represent the constituency of Simcoe, in the new Legislature, will add materially to the strength of that body. He has had a successful business experience extending over many years. In the Association he represents the Tudhope Carriage Co. of Orillia. The advent into public life of substantial business men such as Mr. Tudhope augurs well for the good government of the Province.

The kind of citizenship one meets with in New Ontario is nothing if it is not youthful and vigorous, and it is only natural that the men it contributes to the public life of the Province should evidence the same characteristics.

Mr. J. J. Carrick, the newly-elected member for Port Arthur, is typical of the man from up north who has "made good." Ever since he started in as a university graduate in 1897 to travel for the Queen City Oil Co., he has been setting his own pace in the field of business enterprise. Where others have failed he has succeeded, not so much by reason of his native ability or capacity for work, though he possesses both to a high degree, but simply because of his iron determination. When he makes up his mind to get a thing he usually gets it. Three years ago he wanted some streets opened up in Port Arthur. The Council refused to do it for him, so he had himself elected alderman. After that everything was

easy. This year he was returned as mayor with the largest majority the city has ever given.

In view of his past achievements, it seems safe to predict that Mr. Carrick will prove somewhat of a surprise party to



Mr. W. K. McNaught

Who has been responsible for much good legislation in the legislature.

the august front benchers in the Legislature, who naturally expect the new-comer, for the first session at any rate, to take his seat away over in the corner and say nothing.

A Representative in Quebec.

The Province of Quebec, with its big manufacturing interests centred in the cities of Montreal, Quebec, Sherbrooke, and a few others, has of recent years been legislating on the most important of industrial problems. During the past session it has had under consideration legislation dealing with insurance, compensation to workmen who suffer injuries, and other far-reaching subjects. Since the great majority of the members represent rural constituencies, it is essential that the manufacturing interests have some voice in the councils of the Province. This they have had since 1906 in the person of Mr. W. F. Vilas, member for Brome.

Mr. Vilas is a manufacturer of school furniture and farm implements at Cowansville, P.Q. He is a member of the Council of Arts and Manufactures of Quebec and of the Canadian Manufacturers' Association. His prominence in the manufacturing field and in civic affairs, made him the successor, by acclamation, to Hon. J. C. McCorkill, when the latter retired in 1906. Again at the recent election he was returned to represent Brome. Mr. Vilas is a Liberal in politics. The manufacturers of the Province should profit from the presence of one of their number in the Legislature during a time when strong influences are at work to secure the enactment of legislation inimical to their welfare.

Mr. James Beveridge, who has been looking over several sections of the Miramichi for a paper mill site since last fall, has decided to locate at Millerton, N.B. The properties of Messrs. Allan Knight and Morris Tulip have been secured. The Knight brook, which runs through the property, will furnish sufficient water to run an extra large mill. A siding will be built to connect with the Indiantown branch. When the mill is completed Mr. Beveridge expects to employ 160 hands, running day and night. The mill will probably be completed about September.

IMPORTANT RULING.

AN important ruling has just been made by the Board of Railway Commissioners in the interswitching case. Substantial relief has been granted shippers as a result of the aggressive fight which has been made by the Transportation Department of the Canadian Manufacturers Association against these charges. By the present order carriers are required to reduce their tolls for switching within terminals. Where instructions for delivery on a second road are given subsequent to shipment, a charge not exceeding 20 cents a ton is allowed. For ordinary interswitching, where business originates at a non-competitive point, the charge shall not exceed 10 cents a ton. Moreover, in the latter case the contracting carrier must absorb half of the switching charge. This decision will mean a saving to practically every shipper in Canada.

THE SUPPLY OF CARS.

We are on the eve of the biggest crop movement in our history. The stocks, too, in the stores of Western Canada are depleted. Simultaneous with the movement of grain to the market this autumn will set in a great movement of merchandise to the distributing centres of the west. It is not too soon to ask: In what condition are the railways to handle this traffic? Three years ago, and again two years ago, there was a lamentable failure on the part of the railways to supply adequately the demand for cars. Last year we were saved from a still greater shortage by the partial failure of the crops and the depression in trade. During the present year there has been practically a cessation of car-building or repairing. It is currently stated that a considerable per cent. of the rolling stock of one company is unfit for



Mr. J. J. Carrick

A member of the Association who will sit in the next legislature of Ontario

service. Repairs should be rushed with all speed, so that every possible car and locomotive may be available when the grain is ready for shipment. This year, especially, it is desirable that the crops be marketed promptly and the money set in motion in the regular channels of business.

WATER CURTAINS FOR FIRE PROTECTION.

A WATER CURTAIN is intended to prevent the building on which it is installed from taking fire from outside sources. In the ordinary brick or stone building the only way in which fire can enter is through the window and door openings and the roof. Water curtains are designed to prevent the possibility of this, and consist of a system of piping running along the tops of the windows and cornices, with one or more outlets over each window. These outlets are fitted with specially designed sprinklers, which throw the water, under pressure, over the glass and frames of the windows, forming a curtain of water through which it is impossible for the fire to pass. The water supply for these curtains is taken from the city water mains, and is controlled by a valve located in a convenient place in the building. In case of a fire in an adjacent building or across the street, this valve is opened and allows the full pressure in the city mains to play on the windows and cornices of the building. A secondary supply is also provided through a Siamese connection, to which the Fire Department may connect their steam engines and thereby increase the pressure of water.

A substantial reduction in rates is granted by the Insurance Companies on buildings protected by these water curtains. And this fact is ample proof of the efficiency of this system. The Insurance Companies believe in it, and on page 635 of our March issue, in suggesting remedies for the prevention of conflagrations, we recommended the freest use of the water curtain as an effective fire-drop. The accompanying illustration shows such a curtain in operation on the building occupied by the Gazette Printing Co., in Montreal. The exposure on the side being operated is a lumber yard, that on the rear a manufacturing building.



The above illustration shows a water curtain in actual operation. By protecting the windows it makes the building practically proof against fire from without.

DEATH OF MR. A. R. MUNROE.

The death occurred on June 10th of Mr. A. R. Munroe, manager and chief shareholder in the Munroe Wire Works, New Glasgow, N.S. Mr. Munroe was one of the most energetic and successful business men of the Maritime Provinces, and his death at the early age of 44 has caused intense regret to all those with whom he had come in contact. About nineteen years ago he organized the business in a small way, which has since grown to be one of large proportions. He represented the company in the Canadian Manufacturers' Association.

RAILWAY AND SHIPPING NEWS.

THE QUESTION OF ELEVATORS.

HON. FRANK OLIVER and Hon. Geo. P. Graham announced that it is the intention of the Government to build or have built a railway from western Canada to Hudson Bay. Since the project has been taken up as a definite Government proposition we may suppose that the details have been worked out with some degree of accuracy.

It may not be out of place to enquire what provision is going to be made for elevator service? The situation is briefly this: The chief grain crops are not harvested and threshed before the middle of September. At about the same time the Straits leading from Hudson's Bay to the Atlantic become frozen and impassible. Hence practically all the grain which is to go out by this route will have to be stored in elevators either at Fort Churchill, or where the farmer delivers his grain to the railway.

The construction of the railway is justifiable only on the assumption that a large amount of grain will go by that route. The chief advocates of the road place 20,000,000 bushels as the initial quantity, and this, they maintain, would increase greatly in a comparatively few years.

Now, to get back to our original question, what provision is being made to store twenty, or thirty, or forty million bushels of grain? This is not grain which will come one day and go the next. There must be elevator accommodation for this amount for a straight period of nine months. Will the Hudson's Bay Railway, whoever builds it, have this accommodation at Fort Churchill?

MONTREAL LEADS IN GRAIN SHIPMENTS.

GREAT perturbation has been caused in grain and steamship circles in New York over the fact that Montreal has been walking away from her bigger rival in the quantity of grain which is being shipped through the two ports. Up to the present, since the opening of navigation, Montreal has booked 8,000,000 bushels against 2,000,000 bushels for New York. As a result five boats have been taken off the New York route by the White Star line alone, and there is a prospect of many others being retired unless conditions show a marked improvement.

It is, of course, a straight matter of cost of transportation. The all-water rate from Duluth and Fort William f.o.b. steamer at Montreal, including extra insurance, is 4.25 cents per bushel, and from Chicago and Toledo not over 3.75 cents per bushel, whilst the rate from the same ports via Buffalo to New York is 7.40 cents per bushel—a difference of practically 3½ cents to 4 cents a bushel.

The lake and rail rate from Georgian Bay ports f.o.b. steamship at Montreal, is 4.75 cents against 7.40 cents via Buffalo to New York or Boston, a difference of 2.65 cents a bushel.

The interested ones in New York have passed resolutions and have appointed committees, all with the intention of reducing the railway rates from Buffalo east. The railways, according to them, are the offending members who are driving business from New York to Montreal.

That no possible reduction by the United States roads can turn the flow of business back to New York is shown by a freight broker of Montreal. "No railway," he pointed out, "or combination of rail-and-water routes, can compete with the all-water route from the head of the lakes to Montreal, under present conditions; that is, when freight is scarce. Any number of lake boats have been laid up for want of freight, but as no owner likes to see all his vessels lying idle, if they can be made to pay bare expenses or even do not show too great a loss, these lake carriers are accepting cargoes of grain, big or little lots, it doesn't matter for them, from Fort William to Montreal, at the same rate that the railways are asking from Georgian Bay ports to Montreal. The railways have got that rate down to rock bottom, and the quotations that the lake carriers are giving, knock the rail-and-water routes out of the running, as they leave nothing to pay the railway boats for their part of the journey from Lake Superior to the Georgian Bay. The United States roads and United States ports are naturally away out of the running if even the Canadian railways cannot compete."

WILL LIMIT DIVERSION OF WATER.

THE principles upon which the natural flow of water in international waterways can be altered were set forth in a report to Parliament by the Canadian section of the International Waterways Commission recently. The sections representing Canada and the United States were unanimous in their findings. The report dealt specially with the Chicago Drainage Canal and the power development plants at Niagara Falls.

In reference to the Chicago Drainage Canal the joint commission recommends that the Government of the United States prohibit the diversion of more than ten thousand cubic feet of water per second for the canal, that amount being considered sufficient for the sanitary purposes of the city for all time and providing for the largest navigable waterway from Lake Michigan to the Mississippi River which has been considered by Congress. The amount by which the mean level will be lowered by the discharge of ten thousand cubic feet through the canal is estimated at about six inches in Lakes Huron and Michigan and about five inches in Lake Erie and four inches in Lake Ontario.

Any further diversion, the commissioners say, would mean the expenditure of a very large amount of money to restore depth in both United States and Canadian harbors and to maintain a uniform draft of 14 feet in the Canadian canal system.

After exhaustive investigations it was decided that the maximum of water which could be drawn from the Niagara River without destroying the scenic beauty of the Falls was 36,000 cubic feet per second on the Canadian side and 18,500 cubic feet per second on the United States side. The commission, therefore, recommended that the diversion of water be limited to these amounts respectively. The Canadian section, however, recommended that any treaty which should be made in accordance with their findings, should be limited to twenty years.

The position of the three companies now operating on the Canadian side was also discussed. The Canadian section advised that all future companies be compelled to distribute all the electrical energy developed in Canada. The present companies are under obligation to supply Canadian consumers up to half the amount generated. As they are permitted under their charter to generate 400,000 horse power, one-half of the production would satisfy Canadian demands for a long time to come. The necessity, however, of the government controlling the export in the interests of Canadian users was strongly urged.

THE HARBOR OF ST. JOHN.

IT now seems certain that a harbor commission will be placed in charge of the deep-water facilities of St. John, N.B. Civic authorities have been in consultation with the federal government, and the result has been an agreement whereby a commission will be appointed to take over all the water front and city wharfs, and the government will guarantee the bonds of the commission so that it will be able to borrow money at a considerably lower rate than the city could.

The city of St. John has done notable work in improving its harbor. With the increase in the number and tonnage of the vessels coming to its wharfs, it has had to make proportionate improvements at a great cost. The city is not large in population, considering the business that is done through it, and the consequence is that the money which has had to be spent has proved a heavy burden on its resources. The city felt that it had reached the limit of its borrowing power.

Yet much remained to be done to keep the harbor up to the standard required by the vessels which made it their Atlantic terminus. Various plans have been put forth to make the traffic pay for the necessary work. The nationalization of the port, whereby the Dominion Government would take it over and keep it up as a national undertaking, met with considerable favor, but the many calls which would be made on the government for similar favors, if the principle was once admitted, prevented the adoption of that plan. Something of the kind may come in the future.

Under the present plan the commission will pay back to the city all money spent heretofore on improvements, and will take over the harbor and water front. To meet the cost it will borrow money under the guarantee of the Dominion Government. In this way the interest charges, which the citizens will have to pay in either case, will be greatly reduced. The commission will be able to borrow at the lowest rate.

This seems like a reasonable proposition. With an efficient board of commissioners the harbor can be managed in a thoroughly businesslike manner. The cost of the work can be kept down to a minimum, and the traffic can bear the expense without unloading the heaviest part of the burden on to the back of the St. John's citizens.

The admirable work carried on by the harbor commission of Montreal gives an excellent prospect that this is the correct method of handling the problem.



The head of inland navigation. The picture shows a part of the Fort William harbour, with the big C. P. R. elevator pouring its store of grain into the lake vessels. In the distance are seen other elevators.

The Crane Co., whose main plant is in Chicago, and who recently purchased the business of the Boyd-Burns Co. of Vancouver, B.C., will build an addition to their Canadian branch.

MEN OF THE MONTH.

JOINS C. P. R. DIRECTORATE.

A SEAT on the board of directors of the Canadian Pacific Railway is to the business man of Canada what membership in the Royal Academy is to the artist. The magnificent extent of the company's interests, its national character, and the high standing which has uniformly characterized its directorate, makes the board a guarantee of the business standing of its members.



Mr. Robert Meighen
President of the Lake of the Woods Milling Co., who has been chosen to the directorate of the Canadian Pacific Railway.

Consequent upon the recent death of Sir Robert G. Reid of Newfoundland, Mr. Robert Meighen, a close personal friend of the deceased gentleman, was given a seat on the board of directors of this company. Mr. Meighen has enjoyed an honorable career. Essentially a self-made man, a class, by the way, of which Canada can produce many notable examples, he has attained the highest success in the business world, without deviating from the path of strict integrity and fair dealing. As president of the Lake of the Woods Milling Co. he has directed the policy of one of Canada's best known industries. His work in this connection, and as president of the New Brunswick Railway, has brought him into intimate relations with the conditions affecting both eastern and western Canada. His appointment to succeed Sir Robert Reid has been most favorably received by business interests.

PRESIDENT AMERICAN ASSOCIATION.

ALTHOUGH Canadian foundrymen do not figure in large numbers in the membership of the American Foundrymen's Association, they play an important part in the deliberations of that body. During the month of June this Association held its annual convention in Toronto. As a tribute to the fine work of Mr. L. L. Anthes, of the Toronto Foundry Co., both in his previous official position of vice-president, and in the excellence of the convention arrangements, for which he was to a large extent responsible, he was elected president for the coming year.



Mr. L. L. Anthes
Of the Toronto Foundry Co., who was elected President of the American Foundrymen's Association, at the recent convention in Toronto.

The new president belongs to the younger generation of Canadian business men. He combines in an exceptional degree the qualities of clearness of thought and facility of expression. These vitalized by abundant energy make him a man to be reckoned with in the industrial world.

The body which he will preside over for the coming year embraces foundrymen from all over the United States and Canada. At the recent convention over two thousand delegates were registered.



In his statesmanlike speech before the Toronto Board of Trade recently, Sir Thomas Shaughnessy urged the importance of keeping the channels of Trade running east and west.

OUR TRADE ROUTES.

WHEN it comes to a discussion on transportation matters, Sir Thomas Shaughnessy is entitled to every consideration. He knows his subject as few if any other men in Canada know it. His address at the Toronto Board of Trade banquet recently was a statesmanlike exposition of the object at which Canada should aim in developing her transportation facilities.

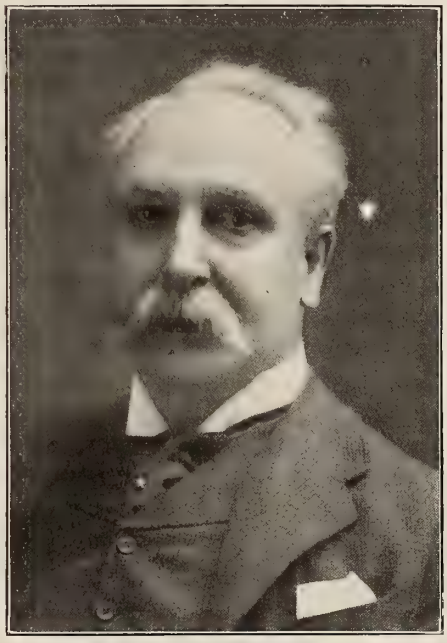
"We must establish," he said, "such relations between the merchants and manufacturers of Eastern and the merchants and consumers of Western Canada as will make the trend of traffic and social

intercourse in Canada east and west. If we succeed in doing that we shall not only make these strangers, these colonists who have come here to build up homes for themselves and their families, good Canadian citizens, but we shall be able to make them strong advocates of every policy calculated to advance the material interests of the country, and bring the various Provinces into closer connection, and thus more firmly establish the original idea and intention of Confederation."

This is a policy which has everything to support it. If we fail to adopt and carry it out, a homogeneous national life will be impossible. Sir Thomas, with the large outlook that the trans-continental railway over which he presides, gives him, recognizes the diversity of our interests, our occupations, and our original nationalities. He shows his constructive statesmanship in not for a moment admitting that this diversity presents an insoluble problem, but in grasping the one big idea upon which a community of life and interests must be built, the intercourse of trade and travel by national routes. Canada stretches across a mighty continent. Her highways must traverse her territory from east to west.



Mr. Frank A. Rolph
Chairman of the Toronto Branch of the Canadian Manufacturers' Association for 1908-1909.



Ald. Geo. W. Sadler
Chairman of the Montreal Branch of the Manufacturers' Association for 1908-1909.

MR. ROLPH ELECTED CHAIRMAN.

A WELL-merited honor was bestowed on Mr. Frank A. Rolph by his fellow-members when they elected him Chairman of the Toronto Branch at the annual meeting, held on Thursday, June 25th. That the office went to him by acclamation speaks the more strongly for his sterling qualities and fine executive ability which ensure beyond a doubt a continuance of the good work and wise policy which characterized the regime of the retiring Chairman, Mr. Freyseng. The deep interest Mr. Rolph has always taken in the work of the Association as a member of the Technical Education Committee and of the Executive Council, and particularly the energetic and capable manner in which he discharged his official duties as Vice-Chairman of the Branch last year, richly deserved the recognition they obtained, and there is no doubt the choice made is a wise one.

The new chairman is managing director of one of Toronto's oldest and most important industries, the engraving and lithographing firm of Rolph & Clark, Ltd., with whom he has acquired an extensive business experience. He has lived in Toronto all his life, and among his fellow-citizens is exceedingly well and favorably known. He is a prominent club man, being director of the National and Royal Canadian Yacht Clubs, and a member of several other social organizations. As a sportsman he enjoys the reputation of being one of the best amateur sailors in Toronto, and has served as a judge in the Canada Cup trial contests on several occasions. He is also a noted angler, his holidays being usually devoted to the ancient but fascinating sport.

Bringing such a ripe experience in business and social affairs to his new position, the members of the branch can rest assured that their interests will be safe in the hands of an executive presided over by Mr. F. A. Rolph during the coming year.

ALD. GEO. W. SADLER ELECTED.

Ald. Geo. W. Sadler is one of the earliest members of the Canadian Manufacturers' Association, and has served for a number of years on the Executive Council and on the Montreal Executive Committee. Mr. Sadler was born in Montreal in 1852, and has been connected with the tanning and leather belting business since 1876, first with Robin & Sadler, and from 1895 as senior partner of the firm of Sadler & Haworth.

Mr. Sadler has been a member of the Montreal City Council since 1896, and for the past ten years has held a seat on the Finance Committee, which is the most important branch of the civic administration. Mr. Sadler is prominent in all matters pertaining to the welfare of his native city, and is a governor of several hospitals and public institutions. The election of Mr. Sadler, by acclamation, to the chairmanship of the Montreal Branch, ensures a year of activity and progress for that part of the Association.

A LARGE SAVING IN CUSTOMS DUTY.

SINCE the organization of the tariff department of the Canadian Manufacturers' Association, it has been discovered that many manufacturers have been unaware or neglectful of the drawback clauses of the customs tariff. As a consequence one company has lost fifteen hundred dollars in the past three years, others have lost similar amounts.

It would be well for all manufacturers who do an export trade to become thoroughly conversant with the terms of the drawback clause. The essential feature of it is that where goods are imported as raw or partly finished material, and having been manufactured are re-exported, a drawback of 99 per cent. of the orignal duty paid is granted by the government.

Subjoined is the clause in full. A close perusal of it is recommended.

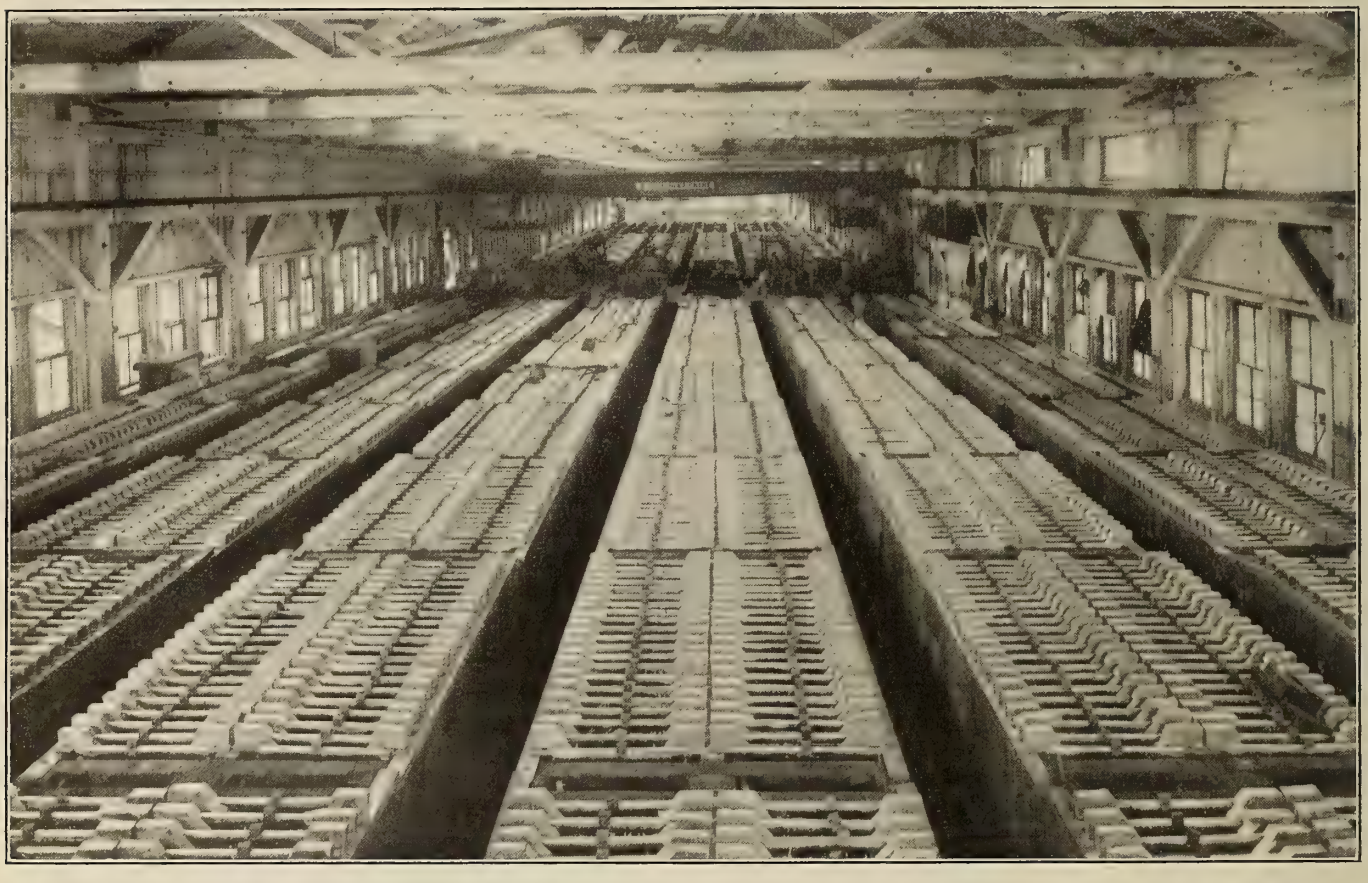
> When imported materials on which duties have been paid are used, wrought into or attached to any article manufactured in Canada, there may be allowed on the exportation of such articles beyond the limits of Canada a drawback of ninety-nine per cent. of the duties paid on the materials used, wrought into or attached to the articles exported; provided, however, that such drawback shall not be paid unless the duty has been paid on the materials so used as aforesaid within three years of the date of the exportation of the Canadian manufactured article, nor unless the claims as presented at any one time aggregate ten dollars.

The following sections set forth the method of procedure on the part of the customs officer. A form, copies of which may be had from the department at Ottawa, or from the Association offices, must be filled out and a declaration made as to the correctness of the statement. From the above clause it will be seen that all articles are subject to a drawback, provided they are used for manufacture and are then exported.

Drawback on Materials for Home Consumption.

Provision is also made for a drawback on materials for home consumption. The articles thus subject to a drawback are contained in schedule B of the customs tariff. The purposes for which they must be used to get the benefit of the drawback, and the amount of the same, are specified in that schedule.

Finally goods upon which duty has been paid on importation, may be sold to a second party who manufactures them further and exports the manufactured products. A drawback of 99 per cent. of the duty paid by the importer, may be secured by the one to whom he sold the goods, providing only that proper forms are made out setting forth the facts.



Apropos of the continuation of the bounty on lead for a further period of five years, the above picture illustrates the electrolytic lead refinery of the Consolidated Mining and Smelting Co. at Trail, B. C. The bounty has enabled this company to work the lead ores of British Columbia and has added materially to the value of the minerals of that Province.

A fire causing damage to the extent of $16,000 to the C. Wilson & Son Scale Works, Toronto, occurred recently. The company, who own as well as occupy the building, report a loss of $3,000 to the three-story frame and iron-clad building and $13,000 to contents. This is fully covered by $40,000 insurance.

IN THE LABOR WORLD.

THE LABOR SITUATION.

A CLASH of legal decisions, during the past month, gives an apparent doubt to the question of the legality or illegality of picketing by strikers. In Winnipeg the case of the plumbers who went on strike two years ago has at last been adjudicated upon finally. The action was taken by the master plumbers in consequence of the interference to their business caused by the systematic picketing of their establishments. Judge Mathers, who sat on the case, has handed down a decision granting the employers $2,000 damages against the union and giving judgment for that amount against individual members. He also issued a perpetual injunction against picketing and interference with men at work. In his decision he stated that the men were within their rights in striking themselves, but they had done wrong in picketing the works of their former employers, and in inducing the men they brought there under contract to desert their employment.

Shortly after this decision was given the men who were picketing the Buck Stove Co.'s plant in Brantford came up for trial before Judge Hardy. In this case the Judge stated that picketing, or, in the words of the Act, "the besetting of works with the object or purpose of the restraint or compulsion of men engaged in lawful labor," was illegal. But he dismissed the case on the ground that in the particular instances before him it had not been shown that the picketing had been for the purpose of restraining or compelling the men who were at work.

In discussing these two cases it might be pointed out that the Winnipeg case has been before the courts for two years and has been thoroughly threshed out in every detail. The decision was the result of a full investigation into every aspect of the situation. It was in no sense a snap verdict. In Brantford, on the contrary, the prosecution was extremely mild. There was no evidence introduced to show the effect of the picketing on the workmen who stayed on duty, nor the motive of such picketing. There was, in truth, no evidence produced to justify the judge in sending the case to the jury.

Yet the law remains the same. The decision of Judge Hardy does not legalize picketing any more than does that of Judge Mathers. Judge Hardy merely passed on the cases before him, holding that in those instances sufficient evidence as to compulsion or restraint had not been presented. Had the picketing been accompanied by any act or word which would influence a workman in the discharge of his duties, it would clearly have come under the meaning of the Act.

The only question of difference in the interpretation of the law by the two judges was as to what constituted compulsion or restraint. The Winnipeg judge held that picketing in itself constituted compulsion or restraint. This was a reasonable assumption. There is no doubt that the surrounding of a plant by strikers is for the one purpose of preventing others from taking their places. Any other motive suggested is a trivial sham. Moreover, under the most peaceful circumstances the work of the picketers partakes of intimidation. The ostentatious approach of a number of strikers, followed by a series of impertinent questions, most certainly tends to scare off the man who is otherwise inclined to go to work. Men who picket a shop have one main object in view, to restrict the operations of the plant, to injure the business carried on therein. This is an offence against the common law. It is unfortunate for the right understanding of the law on this point that the prosecution in Brantford did not bring out the evidence which assuredly existed.

THE METHODS OF UNION STRIKERS.

MR. T. L. MOFFAT, of the Moffat Stove Company, Weston, while going home from church on the evening of June 21st, with six moulders who were employed in his shop, was brutally attacked by strikers, and the whole party were more or less seriously injured. Previous to last May the company had a working agreement with the union, but on the termination of the agreement it was decided to run an open shop. The union men went on strike, but their places were readily filled by non-union moulders. Since the strike began the plant has been picketed and people entering the establishment have been subjected to all kinds of impertinent questions as to their business. However irritating this was to the company, its clients or its workmen, it had no effect on the working of the plant. The shop was fully manned and production has gone on practically unimpeded.

The assault which took place was a natural consequence, however, of the picketing. The strikers were out to stop work in the shop. If they could do it by the peaceful intimidation of pickets, by scaring or persuading or ridiculing those who wanted to work, all right. If not, they were ready to take more strenuous action. The first method failed, and recourse was had to the second. In view of the course of events at Weston, the ruling of Judge Mathers of Winnipeg that picketing is illegal and criminal will meet with general approval.

MILD COERCION.

DIRE indeed is the threat made on behalf of the Paris restaurant waiters that, if their employers do not yield to their demands, they will bring their tyrants to their knees by disclosing the secrets of the kitchen, telling the public the conditions under which the food is cooked, even in best restaurants; how sauces are made, and other dreadful revelations, says the *Witness*. The Parisian stomach is fastidious, fond of mysterious compounds that tickle the palate. How it must revolt at the bare suggestion that there are secrets in the preparation of food that may not be told. The threat alone is so horribly suggestive that should it have the desired effect, the fact will be regarded as proof that the restaurateurs dare not face exposure. The great Soyer said that the making of sauces was the most sublime of culinary mysteries and, therefore, not to be revealed to those who dine. Shut your eyes and open your mouth would seem to be a vulgar translation of his dictum. To all people who partake of food provided for public delectation, it is a wise admonition. They must not be too nice if they would escape qualms.

LABOR CASE IN FINAL APPEAL.

THE action of the Metallic Roofing Co., of Toronto, against the sheet metal workers' union, and the individual members thereof, for injury to business through their boycott of the products of the company, is now up for trial on appeal before the Judicial Committee of the Privy Council of Great Britain. The case has been dragging its weary length through court after court for the past seven years. In every hearing judgment has been given in favor of the company. The company now has a judgment for seven thousand dollars against the union. When the Privy Council gives its decision, which will be final, an end will be made to one of the most interesting fights which have ever taken place in the Canadian courts. The principle at stake is all-important. Even a tacit admission of the legality of the boycott would have jeopardized Canadian industry. The fight, as far as it has gone, has established the illegality of this engine of oppression, which the unions have ever been ready to employ to coerce manufacturers.

CONVENTIONS

THE AMERICAN FOUNDRYMEN'S ASSOCIATION.

TORONTO entertained the delegates to three conventions during the past month. Foremost of these was the American Foundrymen's Association, with its allied bodies. A prominent feature of this convention is the display of foundrymen's supplies which are on exhibition throughout the meeting. The buildings of the National Exhibition were utilized for the meetings and exhibits, and for the latter especially the fine Process Building and Machinery Hall were peculiarly adapted.

At the business sessions papers were read on a wide variety of subjects. These aroused general discussion, which served to bring out a great mass of useful information for the foundrymen present.

The exhibits, however, attracted the chief attention. Among the Canadian exhibitors were the Ontario Wind Engine & Pump Co., Toronto ; Goldschmidt Thermit Co., Toronto ; Jules de Clercy, Montreal ; the Canadian Pneumatic Tool Co., Montreal ; the Canadian Laboratories, Ltd., Toronto; and the Reid Foundry Co., of Ingersol.

There were a great variety of molding machines shown in actual operation. Of general interest was the gravity molding machine made by the Ontario Wind Engine & Pump Co. The sand was carried up to the top of the machine by a rotary process, and dropped on the core with uniform weight. The result was a perfect mold.

The Goldschmidt Thermit Co. gave exhibitions of their welding process in operation.

Jules de Clercy had in operation a Baillot crucible, such as he manufactures in Montreal. The melting of the metal and the pouring of it into molds was one of the most interesting of the exhibits. The metal was drawn off twice a day.

The Hamilton Facing Mills had a large exhibit of their foundry supplies. Canadian Laboratories, Ltd., in charge of Mr. S. B. Chadsey, B.A.Sc., illustrated their testing methods. They carry on general expert testing of metals and chemicals, with head office in Toronto.

The Canadian Pneumatic Tool Co. were represented by a satisfactory exhibit of drilling machinery and tools.

In attendance and general attractiveness the convention was the best which the Foundrymen have ever held. The delegates were entertained in admirable fashion by the city of Toronto, the local foundrymen, and the Canadian Manufacturers' Association. At the last business session Mr. L. L. Authes, of the Toronto Foundry Co., was elected President for 1908-9.

THE CANADIAN ELECTRICAL ASSOCIATION.

THE convention of the Canadian Electrical Association, held in Toronto on June 17, 18 and 19, was in every way a success. The attendance was good, and the interest taken in the papers and exhibits was most encouraging. The Secretary's report showed an increase in membership for the year of almost thirty-three per cent., and also drew attention to the widening of interest among private lighting companies.

Some of the papers read were : "Power Rates, and Factors Which Influence Them," by Mr. W. N. Ryerson ; "Hydro-Electric Power Development in Europe," by Mr. C. H. Mitchell ; "Methods of Increasing the Station Load," by Mr. George Williams ; "Modern Street Lighting," by Mr. A. E. Fleming ; "Electric Franchises : Their Legal Status and Basis of Valuation," by Jas. Bicknell ; "The National Electric Code," by Mr. H. F. Strickland ; and other excellent but more technical subjects.

In addition to these, Mr. Saul Dushman, of the University staff, gave a demonstration of the reduction of iron ore to pig iron. This was done by electro-metalurgical apparatus, which is part of the equipment of the University. Mr. Mitchell's paper on electric power development was illustrated with a fine series of lantern slides. Interesting discussions took place over several of the addresses.

The exhibits were particularly interesting. Among those showing electrical appliances were:

The Canadian General Electric Co. exhibited flaming arc lamps, a mercury arc rectifier, a two-ton electric hoist, some of their new Tungsten lamps, a line of electric heating and cooking apparatus, and a full line of electrical specialties. Their electric horseback exerciser created a good deal of amusement and interest. To illustrate the use of the electric motor in household economy, they exhibited a motor-driven sewing machine.

The Canadian Westinghouse Co. exhibited Nernst lamps, a full line of integrating wattmeters, volt meters and ammeters, a lighting arrester, a line of portable instruments, circuit breakers, fan motors and small power motors. A feature of their exhibit was a Westinghouse metallic flame arc lamp. They also showed a motor-driven washing machine.

Canadian Fairbanks Co. showed a full line of small Fairbanks-Morse motors.

Electrical Specialties, Ltd., 12-16 Shuter St., Toronto, showed a line of XCELL Canadian dry batteries, which they manufacture.

The Philip Carey Mfg. Co. exhibited their roofing, cement, and pipe coverings, asbestos materials for different purposes.

Joyner-Greene Co., Stair Bldg., Toronto, showed a line of electrical specialties for which they are agents.

The Oneida Community, Niagara Falls, Ont., exhibited their chain for suspending arc lamps.

The Hamilton Anchor Co., Hamilton, exhibited a full line of Swan and Atlas anchors.

The Allis-Chalmers-Bullock Co. illustrated their manufactures by means of booklets.

THE INTERNATIONAL ASSOCIATION OF FACTORY INSPECTORS.

FACTORY INSPECTORS from the United States and Canada gathered in convention during the month to discuss methods of improving factory conditions. Several papers were read on subjects of interest not only to inspectors, but no less to manufacturers and workmen. The exchange of views should, if the suggestions be applied rationally and with due consideration for local needs and conditions, result in many improvements. The subjects discussed included child labor, sanitation, safety appliances, and others of like interest.

Mr. James Burke, head of the Ontario Factory Inspectors, was elected President for the ensuing year.

Toronto Exhibition.

The Executive of the Canadian National Exhibition announce that application for space is necessary immediately. Allotment is now being made and the applications to date are largely in excess of previous years. The Manager, J. O. Orr, will be pleased to furnish any information desired on addressing him, City Hall, Toronto.

A REVIEW OF INDUSTRIAL CONDITIONS

Mr. E. J. Freyseng, in his annual address to the Toronto Branch of the Canadian Manufacturers Association, reviews the progress of the past year and discusses the prospects for the future.—Some criticisms of objectionable regulations.

BEFORE beginning a review of the work of the past year, or directing your attention to some of the important questions which your incoming officers will have to deal with, permit me to extend to you my heartfelt thanks for the honor you bestowed on me a year ago in electing me to preside over you, an honor which I assure you was deeply appreciated, and to express the pleasure I feel in welcoming you to our annual meeting to hear the account of my stewardship. I sincerely hope you will find it to your satisfaction.

A year ago our retiring Chairman, Mr. John Firstbrook, devoted his opening remarks to congratulations upon the prosperous conditions which confronted the farmer, the manufacturer, the financier, the professional man, the railway magnate and the artisan. To-day we meet under conditions somewhat different from those of a year ago. Up to November last many of our factories were working overtime, but to-day there are some manufacturers who cannot give work to their whole staff at full time. I will not take up your time by attempting to disclose the causes which led to the crisis which came on last fall. It is known to us all than an industrial depression did strike us then, arising from a complication of causes, and up to a couple of months ago business was quiet, and even yet is hardly normal, although steadily improving.



Mr. Ed. J. Freyseng
Chairman Toronto Branch, 1907-8

Trade Returns.

Indications of the slackening up are patent on all sides, but trade statistics show it most conclusively by decreased imports and reduced revenues. The total imports and duties collected in March 1907 were $36,842,076 and $5,911,820 respectively as against $30,052,232 and $4,988,355 in March 1908. Corresponding decreases have been taking place during April and May and will likely do so for the next few months while conditions are improving. Other figures could be quoted to show how the crisis has affected trade in Canada. The exports, as it is to be expected amid dull conditions at home, show an increase during the past few months compared with the corresponding months last year. The figures for March 1908, the last month available, were $18,572,085 as compared with $16,130,005 in 1907. The aggregate trade for the 12 months ending March 1908 still shows an increase over the year ending March 1907, however, of $16,000,000, but a few more lean months will make a favorable comparison such as this is impossible.

Prospects.

But the future is brightened as we look around us and see on every hand abundant evidences of good crops, which only require a continuance of fine weather we have been enjoying, to ensure the realization of a bountiful harvest. It is true we cannot regain the high level of 1906 and the early part of 1907 as quickly as we lost it, but without being unduly optimistic I think I am safe in predicting a gradual recovery in business, which will cause us to forget the worries of the past few months in the busy whirr of our factory wheels in the months to follow. Already the crop prospects are restoring confidence, money is easier, and business in many lines of manufacturing is improving. Let us hope that prospects for good harvests in the west, on which so much depends, will be realized.

Dumping.

Before leaving this subject there is one matter which calls for some comment from us as manufacturers, namely, the slaughtering of foreign goods in Canada, particularly by United States manufacturers, which followed the panic. It only needed a sudden industrial depression, such as we have unfortunately experienced, to prove the force of the manufacturers' arguments for increased protection on certain lines, by showing how inadequate were the present duties to keep the home market for Canadians. The dumping clause was of some assistance in stopping the slaughter which made conditions even more onerous for Canadian manufacturers, but it is necessarily slow in action, and while the governemnt showed commendable activity whenever called on to enforce it, it was clearly demonstrated that machinery will have to be devised to make under valuation of goods more easily detected and so prevented. The engagement by the Association of a special tariff officer will be instrumental in making dumping more difficult, but there is no doubt that a re-arrangement of the duty on many articles is also a necessity if the practice is to be altogether prevented.

Conditions in Toronto.

The clogging of the wheels of industry in the Fall was soon felt in such a great industrial centre as Toronto. The partial closing of many factories, the cessation of work on farms and railroad construction with the coming of winter, filled Toronto with an unprecedented number of unemployed which was further augmented by the headline advertising which the vigorous relief measures obtained in our papers. Looking back on the past winter's experiences with unemployed poor in Toronto, it would appear that the relief measures were slightly overdone, and there were numerous in-

stances of overlapping. In any event those in charge should endeavor, if we have to face a similar situation in the future, to prevent advertisements going broadcast throughout the land, that Toronto is very generous in its treatment of the poor. A big city is naturally an attraction for the unemployed, but there is no reason to make it more so by advertising our charity.

While Toronto experienced a hard winter, industrially speakng, it is with great satisfaction that I comment on the progress which has been made by our city council with the big permanent improvements which last year's chairman mentioned as requiring immediate attention. After years of delay Toronto's harbor at last is to be partially improved by the construction of a new western channel by the Dominion Government. This good work will be enhanced by the construction of a proper sewage disposal system which will prevent Toronto harbor being filled up by sewage discharge if the by-law for that purpose carries on June 27th, as we hope it will. This general improvement is to be further supplemented from a sanitary standpoint by the building of a water filtration plant. All these improvements, delayed long beyond their time, seem at last to be of immediate accomplishment, and the citizens and their officers are to be congratulated on the general progress that has been made. Then, too, it should be noted that the power question is much nearer solution than it was a year ago, due to the passage of the by-law by the people in January last.

Fire Protection.

Other improvements that might be noted are the completion of the high pressure water mains, which, coupled with the construction of the water tunnel under the bay nearly completed, and the installation of the new high pressure pumping engines, contracts for which were recently let, will be of great benefit to all classes, and to manufacturers in particular, from an insurance standpoint. The much involved and long drawn-out problem of separating the grades on the Esplanade has at last reached a point when a decision may shortly be expected, and I have hopes that this decision will be quite in accord with the views of your executive as expressed in their resolution of a year ago. It is satisfactory to know too, that the city fathers and the Board of Trade, to whom great credit is due in connection with this project, will see that no time is lost in carrying out this vast undertaking.

All of these improvements, while entailing the expenditure of large sums of money are essential to the continued progress of our city, and as such your executive has been active in promoting all of them. It is to be regretted that in these general improvements something has not been done to provide an Eastern entrance into the Exhibition grounds which has been an urgent need for several years past. However, the city council cannot be responsible for this omission which, it is hoped, will be remedied before we meet again.

Toronto Manufacturers Hampered.

But while I think the city council are deserving of some praise for the manner in which they have conducted the business of the city this year, there should be impressed on them the necessity for giving manufacturers more favorable consideration if Toronto is to have steady progress as a manufacturing centre in the future. No other city in Canada is so hampered by unduly severe restrictions on manufacturers as is Toronto, and the proof of it is seen in the moving of several industrial concerns to other centres in Ontario during the past year, and the failure of the Department of Industries and Publicity to have numerous large firms just starting, locate in Toronto. The department is in no way to blame for this lack of success however. It is almost entirely due to labor and other legislation on the statute books of this city which hampers the Toronto manufacturers severely.

It is true Toronto has made some progress as a manufacturing centre during the past few years, but her rate of progress is far behind that of many other cities and towns of Canada, as will be seen from the following figures taken from Bulletin II of the Dominion Census Bureau's statistics of manufactures issued last year. The figures show the value of manufactured products in the different centres for the years 1900 and 1905 with the percentage of increase for the five years period:

Value of Product.

	1900.	1905.	Increase P.C.
Toronto	$51,415,498	$85,714,278	47
Winnipeg	8,616,248	18,983,290	120
London	8,122,185	12,626,844	55
Peterborough	3,789,164	11,566,808	205
Vancouver	4,990,152	10,067,556	102
Calgary	599,444	2,303,617	284
Amherst, N. S.	1,551,907	4,174,929	169
Belleville	558,950	1,658,112	196
Berlin	3,307,513	5,449,012	64
Brampton	248,915	819,658	229
Campbellford	354,087	714,652	101
Kingston	2,045,173	4,329,607	103
Meaford	228,025	641,154	181
Niagara Falls	422,728	774,142	83
Stratford	1,935,176	3,824,586	100

These figures prove conclusively that Toronto is not getting her proper share of the increased production of the past few years, and I have no hesitation in saying that this is attributable in great part to the unwise restrictions which surround manufacturing here. Toronto has far more general advantages than any of the places mentioned, but she lacks the paramount advantage of being free from restrictive by-laws. The manufacturers of this city, I am sure, sympathize with the Commissioner of Industries in his efforts to secure new industries, and I think his success is remarkable in the face of the great handicaps he works under. The Toronto manufacturer is broad enough to support anything which is going to confer a benefit on the community, but he does not see why he should suffer at the expense of his competitors in Montreal, amilton, London, or other places in Canada, as is now the case, as a result of several restrictive city by-laws. It is to be hoped the council will go slowly in introducing further measures of this nature.

Falling Off in Building Operations.

Naturally the industrial depression is manifest in the statistics of Toronto's commerce, banking, and building operations. Without wearying you with figures I would point out that the building permits for the first five months of 1908 as compared with the same period in 1907 fell off 190 in number and nearly $3,600,000 in value. It should be borne in mind, however, that last year was a record breaker as to value of buildings erected which totalled $14,325,800, and that the supply of houses for artisans and others, the dearth of which was commented on last year, seems now to equal the demand, so that a decrease in building was to be expected. Even yet there is considerable building activity in the city, particularly on dwellings. Bank clearing returns, customs entries, railroad traffic all show a falling off compared with the 12 months ending June 1907, but there is no occasion for us to lose confidence in the growth of our city on this account, for the present situation is admittedly temporary, and has the further consolation that it prevails all over the world, and in many countries is entailing far greater hardship. We

should bear in mind, too, that Toronto's population is still increasing, and the total assessment for 1908 is $206,385,253 as compared with $185,713,845 in 1907, an increase of over $2,000,000 in a year.

Gentlemen, we have a city here of which we may truly be proud, and one whose expansion in wealth and population is certain. What we have been experiencing during the past few months is only a breathing spell devised by Providence for our own good to enable us to find time to review the past in order to profit for the future. We have every reason to keep our confidence, more so as we read of the bountiful harvest soon to be reaped in the West as well as in Ontario.

Association Work.

From an Association standpoint the past has been a very eventful year, particularly as far as Toronto is concerned. In September nearly 500 delegates met here as our guests for the annual convention. It was the biggest and most successful in the history of the organization, and, thanks to the enthusiasm and executive ability of the tireless workers who constituted the entertainment committees, and the generosity of the members at large, the repuatiton of Toronto as an hospitable city did not suffer. In October the Mutual Insurance Companies were successfully launched under the auspices of the Insurance Department. Their career has been highly satisfactory thus far, and it is to be noted with satisfaction also that the work of the Insurance and Transportation Departments continues to be adimnistered capably in the interests of our members. The great reduction in freight rates which went into effect in January 1st to all points east of Port Arthur marked the close of a long campaign the department has been carrying on. This one matter meant the saving of thousands of dollars annually to our members. Another important innovation which took place quite recently was the organization of a separate Tariff Department with an expert in charge. Although in operation only a few weeks this department has already justified its inception, thanks in great measure to the experienced officer the committee were fortunate enough to secure. The installation of a free translation bureau to attend to the foreign letters of the members, the improvement of the foreign credit report service, and the increase in the facilities for giving assistance to those interested in export trade, have all contributed to making the Association more valuable. As usual Dominion and Provincial legislation has been carefully watched, and measures inimical to the interests of the members strenously opposed and I may add with more than the usual amount.

In fact, gentlemen, the Association is of greater value to-day to you, its members, than ever previously in its history. I have no hesitation in stating that it is the cheapest investment, with the best paying dividends, any of us are intersted in, and I therefore appeal to each of you to go out and get a new member so that next year we will be able to report that we represent every frm in Canada. As it is, there are only some 300 firms outside the Association really eligible. In spite of a bad year with many failures our membership now stands at 2,165 as compared with 2,185 a year ago, while in the Toronto branch we have made a net gain of 8 as appeared from the Secretary's report. As already pointed out, only in exceptional cases have good going concerns been struck off.

Toronto Work.

The report of the Executive read by the Vice-Chairman has dealt in detail with the work of your Branch, so that it will be unnecessary for me to say anything beyond expressing the opinion that I consider that the organization we possess for dealing with local questions answers the purpose quite well, and that every member can rest assured that his interests will be looked after in the best possible manner.

Before concluding I wish to record my appreciation of the loyal co-operation and enthusiasm of the members of the Executive whose cordial support made my task an easy one during the year. Particularly pleasing to me was the tangible expression of their good will when I was compelled through ill-health to ask leave of absence from my official duties last March. I sincerely hope that my successor in office will enjoy the same support from his Executive as it has been my good fortune to enjoy. Nor must I forget the debt I owe the members of the Branch individually and collectively for the valuable advice and assistance they have rendered the Executive from time to time. Their efforts contribute materially to the successful work of the Association, and the knowledge that the members at large are always ready to respond to the slightest demands makes the work of your Executive a pleasure instead of a task.

This report would be incomplete without particular mention of our indebtedness to every officer and member of the staff for their intelligent and zealous devotion to the interests of our Association.

MR. BURKE HONORED.

At the recent convention of the International Association of Factory Inspectors, held in Toronto during June, Mr. James Burke, Chief of the Ontario Inspectors, was elected President for the ensuing year. Mr. Burke has been a Factory Inspector now for several years, and his face will no doubt be familiar



Mr. James Burke
Inspector for Ontario who was recently chosen to the presidency of the International Association of Factory Inspectors

to all manufacturers of the Province, whose factories he has visited in the course of his duty. The work of his department has been carried on with an aggressiveness which was to be expected from a man who has opinions of his own and has the courage of his convictions. He is to be congratulated on the recent recognition of his worth by his fellow inspectors.

FOREIGN MARKETS.

A FIELD FOR DEVELOPMENT.

The business of the Latin-American countries, that is, the countries of South and Central America, and Mexico, is being watched closely by the more far-sighted of the manufacturers of the United States. How much they are interested in it is shown by the establishment, at Washington, of a Bureau for the South American Republics, the tour of these countries by the Secretary of State, and the frequent discussion of the trade possibilities in the trade and commercial papers.

Of no less interest is the subject to Canada. We are well situated to get a share of the trade; our relations are cordial; and we need foreign markets to consume our surplus products. The whole of Latin America includes twenty different Governments, with a population of approximately sixty-five millions, and a total annual foreign trade of nearly $2,000,000,000. The imports of these people amount to $897,128,563, and their exports $1,070,660,724 in one year. Of these amounts Canada supplied them with goods to a value of $4,479,235; and bought from them in return to the value of $2,764,552. The following tables show our trade for the year 1907 with the individual countries:

	Exports from Canada.	Imports into Canada.
Argentina	2,266,783	872,026
Bolivia	1,222	.....
Brazil	969,001	350,138
Central American Rep.	85,457	84,916
Chili	274,008	117,806
Ecuador	2,509	2,035
Mexico	477,119	919,932
Panama	92,318	.....
Peru	118,505	51,431
U. S. of Colombia	53,130	277,040
Uruguay	111,196	24,787
Venezuela	27,987	64,441
	$4,479,235	$2,764,552

These figures go to show the field there is open to Canadian enterprise. Enough has been done to show that more is possible.

MAIL SERVICE TO HONG KONG.

A new arrangement will go into force this autumn in reference to mails to Hong Kong and China. Heretofore the Liverpool to Hong Kong mail service was given by the C. P. R. under an annual subsidy of $350,000, of which Great Britain contributed $300,000 and Canada $50,000. The British Government was unwilling to contribute this grant, and as a consequence a rearrangement has taken place. The C. P. R. will continue to give the service, but the total subsidy will be reduced from $350,000 to $225,000. Of this Canada will contribute $125,000 and Great Britain $100,000. The service given by the Canadian railway and steamship company has been very satisfactory and efficient, and in view of the rapid opening up of the Asiatic countries to the commerce of the West the continuance of the service is highly important. Canada should gain much in the next few years through a close connection with China.

TRADE WITH NEW ZEALAND.

The satisfactory growth of Canada's trade with the Antipodes is shown in the reports received by the Department of Trade and Commerce. Trade Commissioner J. S. Larke, of Sydney, who reports upon a visit to New Zealand, shows that despite the lack of direct transportation between Canada and the new dominion, Canada's sales to New Zealand increased from $261,870 in 1902 to $785,440 in 1906, and to $1,032,680 in 1907, while purchases from New Zealand rose from $36,830 in 1902 to $149,075 in 1906, and to $390,075 in 1907. This growth is ascribed altogether to the reciprocal agreement between the two dominions, and is likely to continue to develop steadily.

MARKET FOR BRITISH COLUMBIA COAL.

A large market for British Columbia coal may be found in Mexico, when the coaling station which is to be constructed is completed. Col. E. K. Smoot has received a concession from the Mexican Government, by the terms of which he is to build suitable piers at Manzanillo, alongside of which vessels of ordinary draught will be able to moor for direct bunkering. The coal which has already been brought from British Columbia has been very satisfactory, and it is now only a question of the price at the collieries, whether the Canadian product can compete successfully with the Australian coal or not. Just what the establishment of this big coaling station will mean to British Columbia and to the Canadian-Mexican line of steamships it is hard to estimate at present, but should the negotiations with the colliery companies result in rates being fixed that will allow of competition with the coal brought over from Newcastle, Australia, in sailing vessels and with that carried by tramp colliers from Japanese coaling ports, a large business should ensue.

WOULD EXEMPT CANADA.

The following press despatch is of interest. It deals with the new Patent Law, which has recently been passed in Great Britain:

"Right Hon. Winston Churchill is being urged to see whether as President of the Board of Trade he cannot make a reciprocal arrangement with Canadian manufacturers of agricultural machinery and other patented articles to secure exemption from compulsory manufacturing clause of British Patents Act, which comes into force on August 1. United States, German and other foreign exporters expect to be heavily hit. Indeed, it is estimated the Germans are now spending 25 million pounds in erecting factories here to secure British protection for their patents. Mr. Churchill is most anxious to score in his new post, as Mr. Lloyd-George did before him, and it is believed he might be willing to grant Canada the concessions if properly approached."

UNIFORMITY OF PATENT LAWS.

Uniformity of patent laws within the Empire was suggested at the last Imperial conference. The question was again raised, this time in the British House of Commons, when it was urged that some action be taken to bring about a reciprocal arrangement with Canada. Mr. Winston Churchill stated that the subject would have to be referred to all the self-governing colonies before anything definite could be done. It is now a year since the conference took the matter up, but nothing has so far materialized from it.

INDUSTRIAL PROBLEMS IN MONTREAL

The industrial situation, technical education, and the need for improvements in civic government are discussed by Mr. S. W. Ewing, in his address to the Montreal Branch ot the Canadian Manufacturers' Association.

IN many respects this has been one of the most important years in the history of the Association. Early in the autumn of 1907, financial clouds commenced to gather and since then we have passed through a most trying time, but I am glad to say that the manufacturing interests of Montreal have once again shown their stability and comparatively few failures have taken place. Our Montreal membership since 1904 has increased from 308 members to 425, and in this connection I may say that we have with few exceptions every manufacturer of importance in Montreal in our ranks, and I feel convinced that we have the good will of those who see fit not to ally themselves actively with us. Consequently we can hardly expect to increase in number as rapidly as in the past.



Mr. S. W. Ewing
Chairman of Montreal Branch, 1907-8.

Development of Skilled Workmen.

Mr. Cameron has already presented his able report which has covered fully in the time at his disposal the different activities of your Executive during the past year, and I propose to confine my remarks to practically two subjects only. I find on looking over the annual addresses of my esteemed predecessors for the last three years that the question of technical education or its lack is strongly commented upon. It is therefore peculiarly fitting that I should have the pleasure of announcing the arrangements which have been completed by the Montreal Technical Institute with the Protestant Board of School Commissioners for the opening of evening classes by the Institute in the Commercial and mercial and Technical High School on Sherbrooke St. about September 15th next.

The course of instruction will cover mechanical, geometrical and freehand drawing, designing, chemistry, physics, metal working, wood working, electricity, domestic science, cookery and primary subjects, comprising English, Arithmetic, Algebra and Geometry.

The school will have a machine shop, equipped with machines and tools of the most modern design and of the highest quality. There will also be a complete outfit of electrical appliances. These rooms will be in addition to those now in use during the day in other departments of technical education. The combination will therefore embrace a very thorough and complete series of subjects.

Instruction will be under supervision of a principal, assisted by a superintendent and staff, all of whom will be selected on account of their fitness as teachers in the different subjects.

It is hoped that the manufacturers of Montreal will heartily endeavor to make this Institute a success, and the officers of the Technical Institute desire that the Canadian Manufacturers' Association should co-operate as much as possible with them, as the Institute will depend for support, apart from the pupils' fees, which would only be nominal, upon the voluntary contributions of the manufacturers and their active interest in inducing their employees to avail themselves of the facilities offered.

To Mr. Alexander McFee, the President, and the Honorary Secretary, Mr. Robert Munro, the credit of having finally accomplished the aims of some years of hard work is fully due. I am also glad to note that a much more ambitious Technical Institute is being established by the Provincial Government, and feel convinced there is room for both.

Machinery of City Government.

The time is fast approaching when the city of Montreal will have to face the necessity of improving our municipal government. We have now an unwieldy council of over 40 members. Municipalities are growing up around the city at a very rapid rate and it is only right that they should in course of time become part of Montreal itself. Up to date several of these suburbs have been annexed to the city, each having two aldermen which in nearly all cases gives a representation quite out of proportion to their importance in either population or civic value. If this continues we may have in a very short time a council numbering sixty or more members. The present council apparently realizes this and now proposes to form a board of control consisting of city officials, but I feel convinced that this will not be an adequate remedy.

The bane of our municipal as well as other governments on this continent is without question the patronage system, and under conditions at present prevailing, our city council cannot get away from this system. There are men in our council who despise patronage, but unfortunately there are others—and they are frequently in the majority—who use the power delegated to them, for their own personal advancement or for purely selfish interest of the ward they represent, and the patronage system is more or less the handle which they employ. These men take advantage of indifference on the part of the public, and I regret to say that most of our leading citizens do not show the interest in civic matters that they should.

Need of High Pressure Water System.

As you are aware, certain citizens of the West Ward were forced by the Fire Insurance Companies refusing risks and

cutting down insurance, to start a canvass to have a high pressure system installed. A large majority of the proprietors signed a requisition asking the city council to install such a system in the business district without delay. It is absolutely vital for the business interest of the city that this work should be accomplished at an early date. Our city council have moved very slowly, notwithstanding the fact that they have been written to more than once by the chairman of that committee. At the present moment the citizens of West Ward are paying about $100,000 a year in higher insurance premiums and apparently will continue to do so for an indefinite period. This means that the business men of Montreal are paying a much higher insurance rate than the neighboring city of Toronto.

I have not time at my disopsal to cite many cases of civic mismanagement to back my statement, nor do I wish to single out any particular department for censure. However any citizen can take a walk to the Point St. Charles wheel house and there see a building with the brick work practically falling down, the settling basin close to the civic incinerating department, the water which the citizens drink running along an open duct beside an almost indescribable place of filth, which in their wisdom our civic fathers have picked upon as a proper situation for a burning vault. I am told that the effluvium from this sink hole is at times too awful for words. Outside of the city of Jerusalem there was, as no doubt you will all remember, a place of this description. It is true that a covered conduit is now being built which will to a certain extent protect our drinking water, but in the opinion of good engineers it will be very little improvement on present conditions, on account of the lack of a filtering plant which has not been provided in the scheme.

The Remedy for Bad Government.

We do not need to leave Montreal to find the remedy I would suggest, and in my mind the only solution of the question.

We have in our midst a commission formed on the proper lines namely, the Harbor Commission of Montreal, consisting of three well-known citizens, one of whom is a past president of our Association. Those of us who follow such matters closely can testify to the extraordinary changes which have been made in the port of Montreal in a very short time. These men were not appointed as transportation experts, but the government was particular in selecting them. The success of the present Harbor Board in Montreal has definitely proved the value of a small commission to look after public undertakings.

I believe that we have in Montreal many other good men who are capable of forming a commission, and our Association should start seriously to work to bring the desired results. I feel convinced that if we could have an untrammeled civic commission consisting of independent, fearless and energetic business men, in five years the citizens of Montreal would look back with astonishment at the conditions they once put up with. We would have good pavements and lanes, a proper water system and a highly developed sanitary system. The natural situation of the city lends itself admirably to these and many other improvements, impossible of present attainment, not for want of money, but for lack of judgment in spending it. I trust that the members here present will seriously consider the matter, and as our coming chairman has had great experience in civic affairs, I feel sure that he will do what he can to work along the lines suggested.

On retiring from the Chairmanship of this Branch, I cannot too strongly express my appreciation of the kindness of the different members of the executive; never at any of our meetings has there been one jarring note. Men that I respected before I have now come to regard as good friends. To my successor I can only wish the same success and loyal support from his committee in conducting his meetings which I have received.

Mr. Cameron, your able Secretary, deserves a special meed of praise. He has not only been my right-hand supporter, but by his urbanity and savoir faire kept everything running smoothly. In fact, I cannot look back on one unpleasant moment in connection with the work of the Association during the past year in which you were good enough to elect me your Chairman.

NEWS LETTERS.

Winnipeg, June 29th, 1908.

To the Editor of "Industrial Canada":

Most of the employers of labor in Winnipeg are running short time or resorting to all sorts of plans to retain their full staff in spite of the dulness of trade that at present is on us; the central idea being, that with the promise of a splendid harvest, it is better to retain, if possible, the men, than look for them when the financial return from the crop breaks the present chain that the monied interest have tied to the wheel of our (in their idea) rapid progress.

The West generally being a new country, it is of necessity a borrowing country, and, of course, is paralyzed when it cannot borrow, not so badly now as twenty years ago, when no one had any savings in the banks, for to-day branches of the large banks are scattered all over the West, and some farmers have good balances. In a few years it will read, many farmers have, and in a few more it will be as in the Middle Western States, nearly all farmers have.

The Winnipeg manufacturers are trying to get a more favorable rate of taxation, and expect the Commission will advise some relief. The strange condition being, that while the law in Winnipeg and the law in Montreal are about the same, yet the business concerns in Winnipeg pay about double the taxes. This appears to come about by an assessment being made as high as possible, while Montreal assesses manufacturing plants as light as possible; in fact, this appears to be the general plan all over the States and Canada, excepting only Winnipeg, and then it is the limit of the letter of the law, without regard to public policy, or the development of industry, or justice or fair play. The last two reasons are sound, for it is the general practice to let factories off light in taxes, or give them exemption or even bonuses, in all other cities and towns. Is it justice to soak the unfortunate ones that happened to make their start in Winnipeg?

A large number of the members of the Branch were invited by the Mayor, Council, and Board of Trade of Saskatoon to pay them a visit, and with representatives of the other business organizations of our city, made the trip of 530 miles, and were entertained right royally, both on the train, with drives about the city, and, lastly, with a banquet, at which about 300 sat down. The country through which the train passed, on this new C. P. R. Kirkella branch (for this was the second passenger train to go over), was by all passed upon as wonderfully rich, and soil and crops, wherever seen, were doing well.

W. J. BULMAN.

Halifax, N.S., June 30th, 1908.

To the Editor of "Industrial Canada":

Although the general depression which has visited the continent has to some extent affected this part of the

Dominion, on the whole our manufacturers have been favored with orders sufficient to keep running full time.

A little more than one year ago the Silliker Co. were not in existence in the city of Halifax, but on Wednesday of last week they made their final opening to the public by throwing their works open for inspection, when between three and four hundred persons took advantage of seeing the plant in all its departments, and where they saw the first car from the plant go out to do service over the lines of railway.

The plant at the present time is composed of the following buildings: General Wood Working Mill, Car, the Foundry, Machine Shop, Blacksmith Shop, Car Erecting, Warehouse, Dry House, Power House, Office.

The directors of the firm are: C. J. Silliker, President; Elmore E. Silliker, Robert C. McMann, G. A. Fowler, W. J. Clayton, A. M. Bell.

At the present time more than 200 persons are employed, and the number will soon exceed 300.

The Wood Working Mills has all the orders it can keep up with, and a good start has been made on the contract which they have with the I. C. R. for freight cars and colonist sleepers.

Under the presidency of Mr. Silliker, assisted by such a practical board of directors, success for this enterprise is assured.

Another industry which has taken a very important stride towards success is the Sutherland Rifle Sight Co., situated on the banks of the East River, about ten miles walk from the post-office at New Glasgow. It consists of a brick building containing about 7,000 square feet of floor space, the main building being about 150 x 40. There are fifty-four different machines in the plant.

The work is now in full swing, making a supply of 40,000 rifle sights for the Militia Department, and supplying orders for several thousands from individual marksmen and dealers throughout the British Empire. The sight is patented in Great Britain, United States, France, Germany, Australia and New Zealand. They have been requested by the governments of Great Britain, United States and New Zealand to send them samples, and appear to be favorably impressed with the invention from descriptive circulars.

The future prospects are promising, as they now have orders in hand which will keep the factory at work continuously for two years.

At present about fifty hands are employed, and it is expected another will be added within a few months.

M. McF. Hall.

Wellington, New Zealand, June 4th, 1908.

Your readers will be aware of the death of Mr. R. A. Alley, contractor with the Canadian and New Zealand Governments for the maintenance of a direct cargo service between Canada and New Zealand, known as the "Alley" line. On hearing the news the writer called on the Premier, Sir Joseph Ward, and the Minister for Marine, Mr. J. A. Millar, in order to ascertain in how far Mr. Alley's death would affect the continuance of the line. Both Ministers informed me that the existing contract had still to run for some time and would in no way be affected. When I asked if the line would be continued after the expiration of the present contract, I was informed that the Government had not yet considered the matter, but that most certainly it would not be continued on the present lines.

In my opinion, which is shared by all commercial men, the line will never pay its way unless a monthly service is established, with regular sailing dates by steamers which have at least 500 tons of refrigerator space, and last, but not least, reasonable rates. The subsidy probably will have to be increased, but it is better to pay a little more for an efficient service than a smaller amount for a service which is utterly unfit for the trade.

If the first steamers had been equipped with refrigerator plant, by this time a nice business would have been worked up in perishables. That this is not a mere assertion will be proved by the fact that one Sydney firm has taken up all the available refrigerator space of all the steamers engaged in the Australian-Canadian service.

Before this was done a few tons could be had in the steamers leaving Auckland for Suva connecting with the above line. Mr. J. B. McFarlane, a prominent Auckland merchant, made regular use of this opportunity to ship butter during four months of the year, and was constantly complaining that he could not extend the business for want of space.

After the Sydney firm has taken up all the available space there is no chance to send any perishables from New Zealand to Canada or *vice versa*.

Mr. McFarlane, however, was not to be beaten. He sent a shipment by the New Zealand Shipping Co. to Liverpool, from there across the Atlantic and the continent of America to Vancouver. On comparing expenses he came to the unexpected conclusion that the round-the-world route was a shade cheaper than the direct route. Naturally it would be impossible to build up a regular trade in this round-about way.

Mr. McFarlane's experience proves one thing without a doubt and that is, that the rates charged by the Canadian-Australian line are prohibitive and not calculated to foster trade.

As up to a certain date the management of the Alley line quoted practically the same rates as the C. A., it is small wonder that no business came their way. In fact, their rates were higher, as their boats run direct to New Zealand, whereas the Canadian-Australian line has to tranship in Sydney and has to bring such transhipments to New Zealand ports, a distance of at the least 1,100 miles. As soon as the steamers offer refrigerator space trade will spring up from this side in perishables and will gradually extend to other lines such as flax, tow, wool, hides, tallow, etc.

The new steamers now employed in the service are far superior to the *Pondo* and *Bucentaur*, and particularly the *Den of Ruthven* would be an ideal ship for the trade if fitted with refrigerator plant. There are no stanchions in the hold, which make her a splendid timber carrier. I have not yet seen the *Indravelli*, which steamer, I am informed, is also very suitable, but has the same drawback as the other steamer of having no refrigerator space.

I am glad to be able to state that there is no lack of cargo, mostly timber, from the Canadian side. Lately every steamer was booked up far ahead of the sailing date. The timber trade will steadily increase, as native timbers are getting scarce.

Trade Commissioner, Mr. J. S. Larke, paid one of his periodical visits to this Dominion recently. Mr. Larke had a very good reception, and the Chambers of Commerce in all the centres convened meetings to give Mr. Larke an opportunity to meet the leading merchants. I attended the Wellington meeting, where Mr. Larke spoke at some length on the possibilities of trade expansion between the two Dominions. He laid particular stress on the necessity of better steamer connections, and at the end of his interesting and able speech was met with a hearty round of applause. The Chairman, after thanking Mr. Larke, put before the Chamber a motion in agreement with Mr. Larke's views and promising to support any attempt for a closer connection between the two Dominions, which motion was carried unanimously.

I understand that Mr. Larke is leaving for Canada by the steamer *Manuka* on the 11th instant.

Cosmopolitan.

AMONG THE INDUSTRIES.

ONTARIO.

The city of West Toronto will erect a new school at a cost of $20,000.

Elmira, Ont., will spend $25,000 on extensions to their waterworks system.

A large canning factory will be erected at Ridgetown by the Canadian Canneries.

A Presbyterian Church will be erected in Fort William, Ont., at a cost of $60,000.

The Louis A. Fisher Company of Dryden, Ont., will erect a large sawmill at that place.

Mr. McKelvey states that he has the capital provided for the erection and equipment of a factory.

The expanded Metal and Fireproofing Co. of Toronto will build a cement factory at a cost of $20,000.

The Eureka Refrigerator Co. have purchased a site in Toronto, on which they will erect a factory.

Stockwell, Henderson & Co., dyers, have acquired a site in Toronto, on which they will build this Fall.

Listowel, Ont., will spend $18,000 for the erection of an electric light works, and $6,000 for waterworks.

The Brabant's Brass Works, of Detroit, are considering the establishment of a branch in Windsor, Ont.

A. A. Barthemes will build a factory of reinforced concrete in Toronto for the manufacture of piano actions.

Galt is negotiating with Mr. McKelvey, of Stratford, for the establishment in the former place of a furniture factory.

The Canada Mill Stock and Metal Co., Toronto, have purchased property on which an addition to their factory will be built.

The building of the Standard Chain Works, at Sarnia, Ont., was damaged in a recent storm. The loss was about $10,000.

Oakville, Ont. will install a waterworks and lighting system. Willis Chipman, engineer, Toronto, is in charge of the work.

The Rainer Lumber Co. will erect a saw and lath mill at Rainer, Ont. The saw mill will have a capacity of 50,000 feet a day.

The Morris, Ont., township council will erect a new steel bridge. It will have cement abutments and a steel superstructure.

The Incandescent Lamp Co. has awarded contracts for the erection of a $79,000 factory in Toronto. Work on excavations has begun.

A large sawmill may be erected at Fort Frances, Ont. The Rainy River Lumber Co. are reported to have decided upon its construction.

Forest, Ont., is in negotiations with the Percy and McPherson Brass Works Co., who are considering the establishment of a plant there.

Another bridge across the Niagara river is being discussed. It would be used as a connecting link for the proposed Toronto to Buffalo electric line.

Wm. Harland & Sons, London, Eng., have purchased the Victor Varnish Works, Toronto. They will spend considerable money on improvements.

United States capitalists have applied to the corporation of Niagara Falls, Ont., for a free site, on which they will erect a $10,000 steel rolling mill.

It is reported that the University of Toronto will build a central heating plant at a cost of $250,000, from which heat will be transmitted to all the buildings.

The Victoria, B.C., ship depot was destroyed by fire recently, with a loss of $180,000. This was one of the two biggest ship-building yards in Victoria.

A company is being organized with a capital of $200,000, for the manufacture at Fort Frances, of brick, tile and sewer pipe. J. C. Sullivan, Mason City, is the organizer.

The Electric Meter and Stamping Company, New Hamburg, Ont., have decided to move to London, and are now reported to be about to purchase a site for a factory.

The Horlick Malted Milk Co. of Racine, Wis., are reported to be considering the advisability of establishing a branch plant in Canada. London, Ont., is said to be favored as a location.

A big canning factory is under construction at Stony Creek, Ont. The factory will be built in two sections, each of which will be 100 feet long, and combined will have a capacity of 1,000 cases per day.

The MacLean Cream Separator Co. of Sarnia may move to St. Thomas. Negotiations are now on between the company and the St. Thomas city council, and it is believed that the deal will go through satisfactorily.

Johnston, McConnell and Allison, London, Ont., are interesting English capitalists in a company to manufacture brick. The company will be capitalized at $250,000. St. Thomas and Dorchester, Ont., will be the sites of the works.

The North American smelter which has been built at Thorold, Ont., to refine the output of the Coniagas mine, is now in operation. A staff of from 40 to 60 men are kept employed. The plant in all its tests has been working perfectly.

Mr. McAllister's stave and heading factory at Hawkesville was burned to the ground a few days ago, just after the men had quit work for the day. The lumber and logs were saved. The loss will be a heavy one, as only $2,000 insurance was carried.

A scheme is under way for the amalgamation of the furniture manufacturing establishments of Morlock Bros. of Guelph and the J. A. Cline Co., of Stratford. The amalgamated company would capitalize their business at $150,000. Guelph will be the site of their operations.

Mr. Andrew Anderson, Winnipeg and New York, has submitted to the council on behalf of the capitalists represented by him, an outline of an immense pulp and paper industry which they propose to establish in Kenora, providing certain encouragements are given by the town in the shape of exemption from taxation for a period of ten years and a fixed assessment of $3,000 for a further period of fifteen years.

The company proposes to acquire the water power and lands of the Keewatin Power Company and to erect an immense paper and pulp mill, with a capacity of 300 tons per day.

The plant will cost in the neighborhood of $3,800,000 and operations will commence on or about the first of October next.

About $1,000,000 is to be expended the first year. When in operation this immense industry will employ from 750 to 900 skilled workmen, and 300 to 400 laborers. In addition from 3,000 to 4,000 men will be employed in the woods.

QUEBEC.

A hotel will be erected at Ville Marie, Que., this summer, at a cost of $20,000.

Shirley & Company, St. Andrews, P.Q., will extend their plant, and will build a new warehouse.

The C.P.R. has ordered twenty new engines from the Locomotive Company of Montreal, to be delivered by September 15.

Sherbrooke, Que., has granted aid to the Improved Paper Machinery Co. to purchase a site, and also exemption from taxes for a term of ten years.

The Montreal Cotton Company's mills at Valleyfield have resumed work at practically their full capacity, between 2,000 and 2,500 operators being engaged.

The Improved Paper Machine Company will receive tax exemption at Sherbrooke, Que. The city will also assist the company in the purchase of the site.

The Saraguay Electric and Water Company will instal a new steam plant of 2,000 horse power. Charles Brandeis, engineer, Montreal, is preparing specifications.

The return to prosperity is marked by the increased activity of leading industries. The C.P.R. Angus shops at Montreal are reported to be taking on more men, and the freight and passenger car shops re-opened on July 2nd. The Sault Ste. Marie rail mill has also resumed operations.

MARITIME PROVINCES.

Lunenburg, N.S., will expend $25,000 on extensions to its waterworks system.

St. John, N.B., wants a bridge across the harbour. Its construction would cost $500,000.

The Stanley Railway and Manufacturing Company will erect a woodworking factory at Ryan's Brook, N.B.

Dartmouth, N.S. will spend about $59,700 on extensions to its water and sewage systems, and in erecting a new school building.

Halifax, N.S. may add a glass works to its other industries. C. E. Silliker, with a number of other capitalists, is promoting the enterprise.

J. B. Beveridge, of Newcastle, N.B., is building a paper mill at that place. He will erect twenty-five dwelling houses in connection with the enterprise.

It is expected that construction will soon be undertaken for the plant of the National Rolling Mills at Sydney, N.S., which F. A. Crowell is promoting.

THE WEST.

A courthouse will be erected at Arcola, Sask. Tenders have been called for.

The W. E. Cooke Lumber Co. will build a shingle mill near Poplar, B.C.

The Phoenix, B.C. brewery will be increased to three times its present capacity.

It is reported that A. J. McArthur of Calgary, Alta., will build a tile works in that city.

The B. C. Sugar Refining Co. will erect a $60,000 steel and concrete filter building at Vancouver.

The Dominion Government will build a post office at Dauphin, Man. The estimated cost is $36,000.

Tenders are now being considered for a building for the British Canadian Pulp and Paper Co., Vancouver, B.C.

The Enamel Concrete Co. of Des Moines, Iowa, will build an extensive Canadian branch at Vancouver, B.C.

A rival gas company may establish a plant at New Westminster, B.C. The proposition is now before the city council.

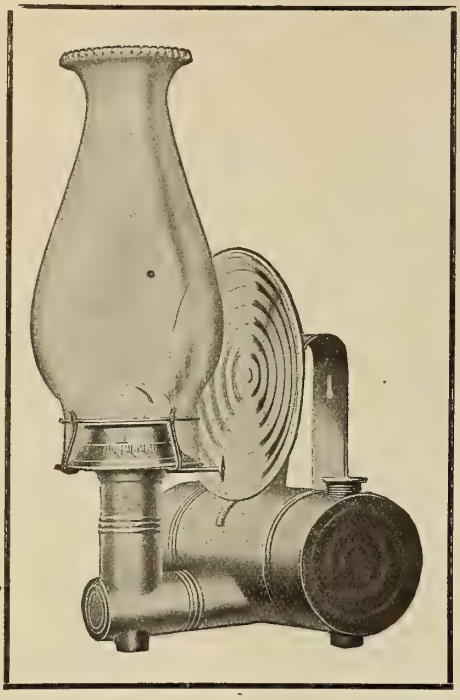
A complete sewage system and sewage disposal works will be installed by the town of Vernon, B.C. at an estimated cost of $57,500.

F. Remer and A. Quaedfleig, of Vienna, Austria, are reported to be considering the establishment of a tannery in Vancouver.

The Brandon Generator and Carbide Co. will establish a plant at Brandon, Man. They will manufacture gas machines and supplies for same.

The Nicola Valley Lumber Co. have erected a large saw mill at Petit Creek, and have started sawing timber. The mill is equipped with the best modern machinery.

The Creston B.C. Electric Light and Telephone Co. have engaged C. H. Mitchell, consulting engineer, Toronto, to report on a water power which they intend to develop.



THE SETTLER'S LAMP

Combination Stand or Hanging Lamp

Made entirely of metal.

Supplied in blue japanned finish.

Fitted complete with Reflector and B-size Canada, or Glass Cone Burner.

CHEAP, SUBSTANTIAL, ATTRACTIVE.

Write for Catalogue No. 10, showing our full line of Lanterns Lamps and Burners.

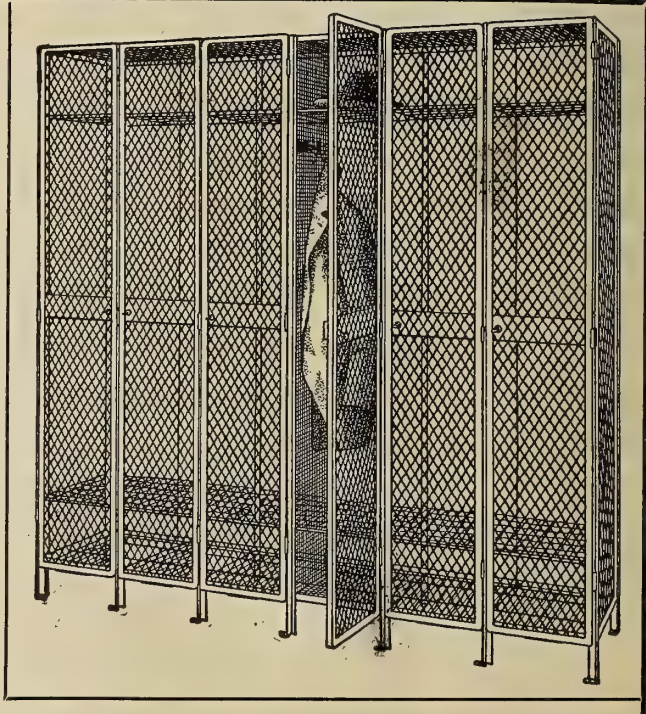
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HAMILTON, - ONT.

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COLLEGES
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to wear out a "GALT" Galvanized Steel Roof. It will wear as long as the roof frame will support it. That's not its only advantage either.

¶ It protects your building from Fire.

¶ It cannot be injured by Lightning.

¶ It is light in weight and therefore does not require a heavy roof-frame.

¶ It requires absolutely no attention—never needs painting.

¶ In appearance it is unsurpassed and therefore large'y used on schools, colleges, churches, residences, etc.

¶ It is remarkably cheap and can be easily erected without any soldering.

What is most important to you is—it makes a satisfactory roof—this we guarantee.

We also manufacture the following Fire proof Building Goods:

"GALT" Fire-proof Windows, Cornices, etc.
"CLASSIK" Steel Ceilings.
"GALT" Steel Siding.
"GALT" Expanded Steel Lath.

We are anxious to send you our handsome Illustrated Catalogs illustrating these goods, if you are interested. Drop us a card to-day. We'll do the rest.

The GALT ART METAL CO.
LIMITED
GALT, CANADA

THOS. BELAIR, Montreal. W. D. BEATH & SON, Toronto.
DUNN BROS., Winnipeg, Regina. ESTEY & CO., St. John, N.B.

"Metallic" Roofing, Siding, Ceiling:

Fire, Lightning, Rain, Wind and Snow Proof, Durable, Ornamental, easily applied.

Corrugated Iron:—Straight or curved.

Fireproof Windows, Doors and Shutters.

Everything that is reliable and artistic in Sheet Metal Building Material.

COPY OF TESTIMONIAL

THE METALLIC ROOFING CO. OF CANADA, Limited
TORONTO.

Simcoe, Ont., April 9th, 1908.

Dear Sirs:—"We have handled your "Eastlake" Shingles for nearly a quarter of a century. They have been on the Court House, Free Library, and other public buildings in this town for 18 years. We have used very large quantities during the past 25 years, and they have always given first-class satisfaction, and have never required any repairs."

(Signed) MADDEN BROS.,
Tinsmiths and Hardware Merchants.

The Metallic Roofing Co., Limited
Manufacturers, Contractors, Exporters
TORONTO and WINNIPEG

Hydraulic Presses
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AND
Company, Limited,
TORONTO, Canada.

For Factory Construction



There is no other material quite so satisfactory —CHEAP, WARM, FIREPROOF, DURABLE, as

"Acorn Quality" Corrugated Sheets

Don't tie up unnecessary capital in expensive buildings. Write us and we'll tell you how to build at small cost, thus leaving the bulk of your capital to develop your business.

Our Catalogue is Free for the Asking

The
Metal Shingle & Siding Co.
PRESTON, ONT. Limited
Montreal Toronto

"WHAT EXHIBITIONS ACCOMPLISH."

To illustrate the influence of exhibitions, Mr. Samuel May, of Toronto, tells a story of his visit to the New Orleans Exposition, in 1885. While there he noticed considerable attention being paid to a patent split pulley, which the inventor was trying to persuade the exhibitors in Machinery Hall to use. Some were willing, while many were sceptical, and in many cases the pulleys had to be provided without charge and put on and their merit actually demonstrated before Mr. Dodge could make even good mechanics admit that there was anything in the new idea. Mr. May was a power user at home and recognized at once what a revolution such a pulley would make. He thereupon negotiated with Mr. Dodge for the patent rights for Canada paying a good round sum for same, also paying a substantial royalty for many years after. That Mr. May's judgment was sound is amply proven by the extent of the plant of the Dodge Mfg. Co., Toronto, where the pulleys are now made for the Canadian market.

A Book on Mechanical Stoking.

No subject is of more consistent interest than that of fuel. By now most users are convinced that under ordinary conditions a large part of the heating qualities of coal is lost. A book just issued by the Jones Under-Feed Stoker Co., Montreal and Toronto, contains a discussion of the merits of the mechanical stoker manufactured by them. The book is well illustrated and contains a lucid explanation of the elements entering into economical stoking. A copy will be sent to any address on application.

Alberta Portland Cement Company Limited

CALGARY, CANADA.

Manufacturers of the famous

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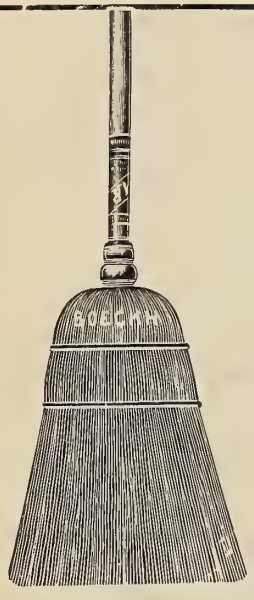
Unequalled in fineness and quality. Fully Guaranteed.

Present Capacity 500,000 Barrels Annually

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The Largest Manufacturers of Pressed Brick in the Western Provinces, Quality unexcelled.

Write for prices



It pays to use a Broom that is adapted to the nature of the work you require it for — an ordinary Carpet Broom will not stand heavy work.

There are several different kinds of

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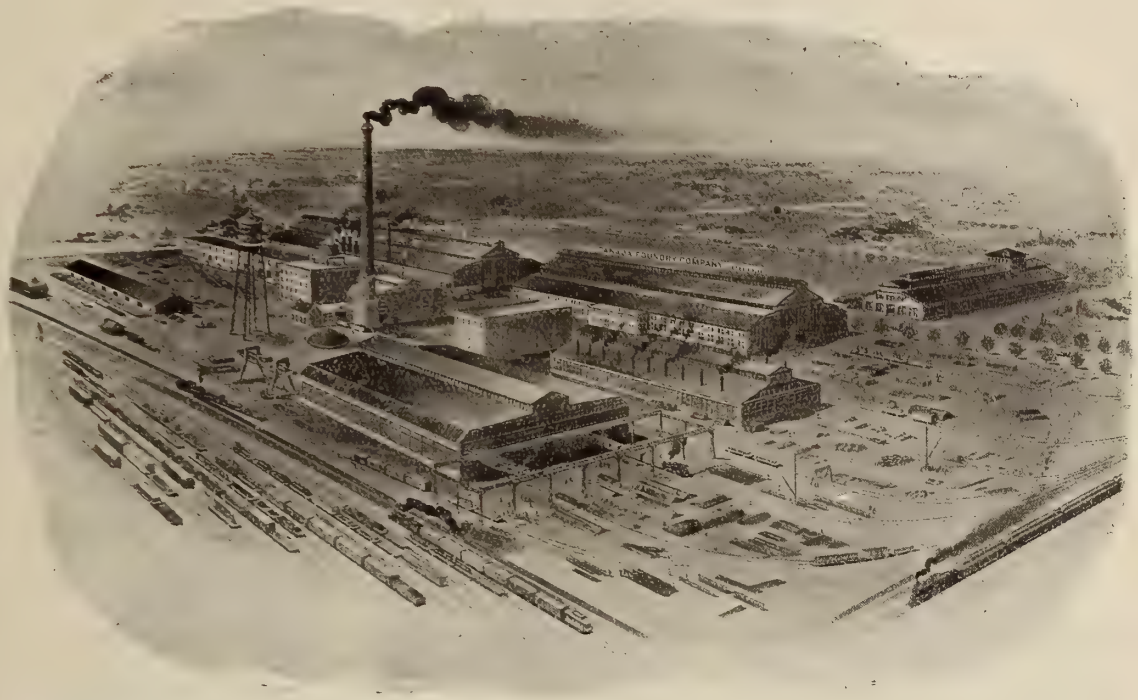
which are made specially for Factory Work.

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District Offices:

MONTREAL HALIFAX OTTAWA WINNIPEG VANCOUVER ROSSLAND

TRADE ENQUIRIES

NOTE.—For further information regarding any inquiry mentioned under this heading or the names of inquiries, apply by numbers to the Secretary, at Toronto.

779 **Agents.—Bordeaux, France,** firm of general commission agents, with well established connection and good references, are open to represent Canadian firms expecting various kinds of products.

780 **Agents.—A** business man in **Lyons, France,** wishes to represent one or more Canadian houses as agent, especially in commodities pertaining to agriculture.

781 **Agencies.—A London** firm wishes to secure agencies for Canadian exporters of most of the ores of the common metals, as such rarer minerals as wolframite, scheelite, molybdenite, tantalite, vanadite, etc.

782 **Asbestos Plaited Packing.—A Manchester** firm asks for prices of asbestos plaited packing from Canadian manufacturers.

783 **Asbestos.—A Tipton** firm is open to buy asbestos.

784 **Bakers Flour.—A** dealer in **Antigua** desires prices and samples of bakers' flour from millers in Canada.

785 **Birch Fooring.—A South African** firm of timber merchants and contractors desire to be placed in communication with Canadian manufacturers of birch flooring, tongued and grooved, ready for use. Samples of the flooring requested.

786 **Boards.—A Manchester** firm desires to obtain prices of leather boards and straw boards from Canadian exporters.

787 **Boots and Shoes.—A** dealer in **St. John's, Antigua,** desires prices of wrapping paper and other stationery from manufacturers.

788 **Boots and Shoes.—A** firm in **Antigua** desires price lists and catalogues of boots and shoes from Canadian manufacturers.

789 **Canned Fruits, Meats, Etc.—An Egyptian** firm of general commission agents with offices at Alexandria and Cairo, report an opening for canned fruits, meats, lobsters, and other fish; also general alimentary articles, and would be glad to get into direct correspondence with Canadian packers seeking export trade in these markets.

790 **Carbon Paper.—A New Zealand** firm which handles typewriters and other office fixtures is desirous of obtaining carbon paper which can be guaranteed.

791 **Carbon Papers, Typewriter Ribbons, Photograph Materials, Stationery Etc.—Adelaide, Australia.** Firm of wholesale manufacturers' agents are open to sell on commission the above materials for Canadian manufacturers.

792 **Chair Seats.—A Manchester** firm asks for prices of chair seats from Canadian manufacturers.

793 **Cut Tobacco.—A** dealer in **St. John's, Antigua,** desires catalogues, prices or samples of cut tobacco, from Canadian manufacturers.

794 **Canned Goods.—A London** firm engaged in the import of canned goods desires to get into touch with Canadian packers and shippers, with a view to receiving consignments, or taking up agencies for the sale of such goods.

795 **Dried Fruit.—A** firm of dried fruit specialists in **Northumberland** would like to hear from Canadian exporters of dried apples, pears, peaches, and other fruit.

796 **Dried Peas.—A** firm of general merchants and importers in the north of **England,** will be glad to receive offers from Canadian shippers of dried peas, packed in 18-stone sacks. Prices c.i.f. Liverpool.

797 **Egg Cases and Fillers.—Lincoln,** England firm are in the market to purchase these goods from Canadian exporters.

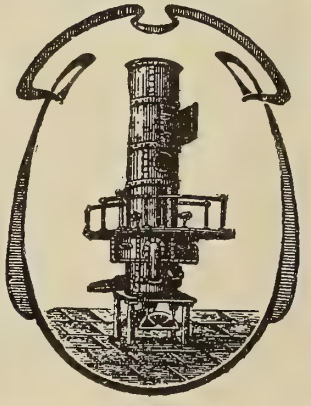
SAVINGS

DOMINION PRODUCERS

would save 50 per cent. fuel in your engine room. 23 plants running in Canada.

VENETIAN GRATES

would burn anthracite screening under your boiler and save 40 per cent. in money. 30 Venetian Grates in Montreal.



SAVINGS

BAILLOT CUPOLAS

would save 25 per cent. coke in your foundry and give better castings.

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HAVE
NINE LIVES

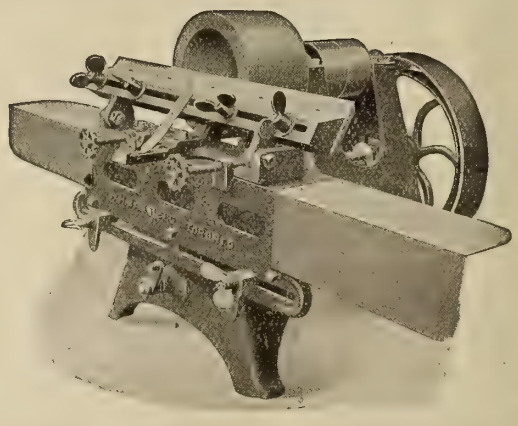
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Knife Grinder

Entirely Automatic
Saves Time and Money
Will Grind 6 in. to 26 in. long.
Does Not Draw Temper

GUARANTEED

W. H. Banfield & Sons
Machinists, Die & Tool Makers
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Are **guaranteed equal** (or better) to any wheel made.

CORUNDUM AND EMERY

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799 **Fish, Flour, Groceries, Etc.**—A grocer in **Antigua** desires to have correspondence with dealers and suppliers of these articles in Canada.

800 **Flour, Fish, Groceries, Etc.**—A grocer in **Antigua** desires to have correspondence with dealers and suppliers of these articles in Canada.

801 **Furniture, Etc.**—A firm in the **Midlands** asks for catalogues from Canadian manufacturers of furniture and fittings suitable for churches, schools, colleges, theatres, hotels, etc.

802 **Ham, Bacon and Groceries.**—A firm in **Antigua** desires prices and lists of grocers' supplies from dealers in Canada.

803 **Garden Seats.**—An old-established firm in the north of **England** would like to receive catalogues from Canadian manufacturers of garden seats.

804 **Hair.**—A **North of England** firm of hair merchants desire to hear from Canadian shippers of white or colored washed cow, calf, or other hair.

805 **Joiners' Tools.**—A Manchester firm asks for descriptive catalogues and prices of joiners' tools from Canadian manufacturers.

806 **Linseed Oil Cakes, Etc.**—A north-east coast of England firm of importers dealing largely in products for the agricultural trades, inquires for Canadian manufacturers of linseed and other oil cakes, and feeding stuffs.

807 **Manufacturers' Agent.**—Winnipeg gentleman about to visit Great Britain would like to hear from one or two good Canadian houses doing an export business, and who might give him their agency on a commission basis while abroad. Will be absent six months, and will cover the best British territory.

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810 **Mortar Mixing Machinery and Conveyors, Grates and Mantels, Metal Filing Cabinet and Office Fixtures.**—A firm of wholesale dealers in Vancouver, B.C., are (references) in the market to purchase or sell on commission the above goods for Canadian firms.

811 **Moulding and Cardboard.**—A dealer in moulding and picture framing requisities desires catalogues and prices from Canadian manufacturers.

812 **Nets, Hearse Horse.—Canadian firm,** members of C.M.A., inquire for Canadian manufacturers of these matter.

813 **Ontario Butter and Cheese, Brushes and Brooms.**—A merchant in **Antigua,** desires prices and catalogues of butter and cheese, brushes and brooms.

814 **Paper.**—A firm in Glasgow exporting printing paper in India, asks to be placed in touch with Canadian manufacturers from whom supplies can be obtained.

815 **Printing Machinery and Materials, Paper, Stationery, Etc., Office Supplies.**—Job printer in St. Vinient, B.W.I., is open to purchase or sell on commission small quantities of the above articles. Payment draft or postal note. References.

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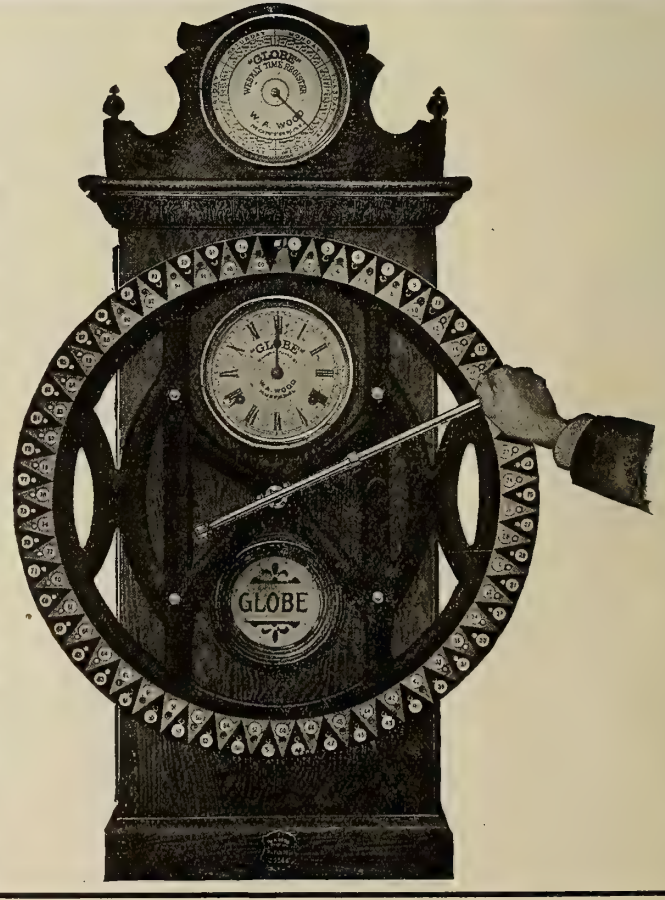
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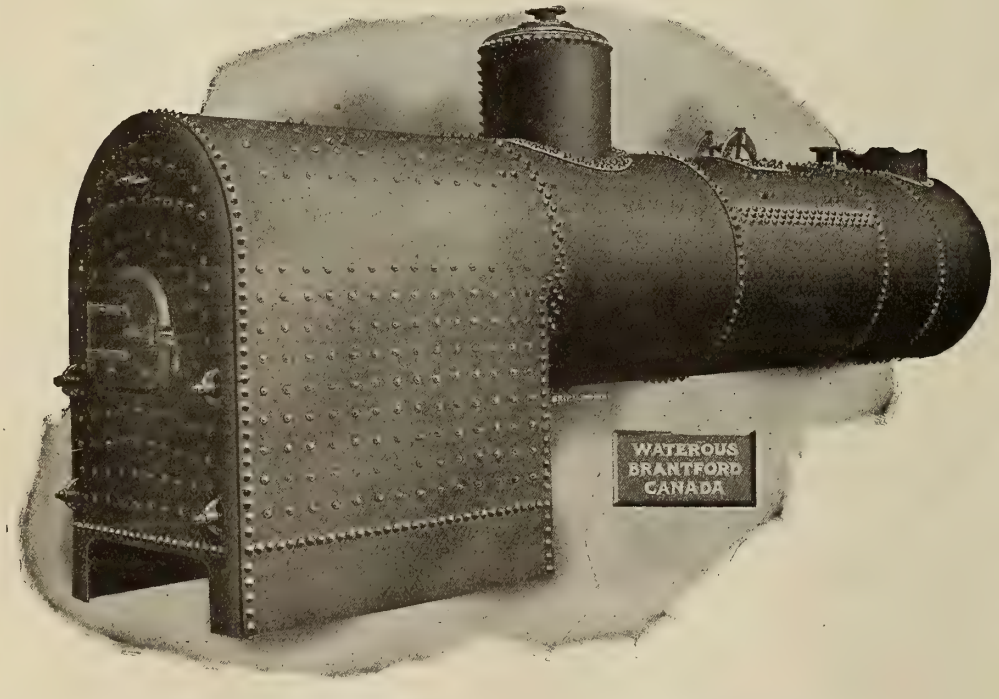
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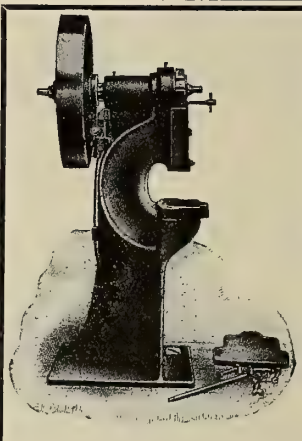
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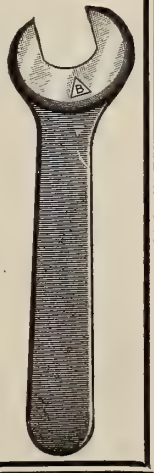
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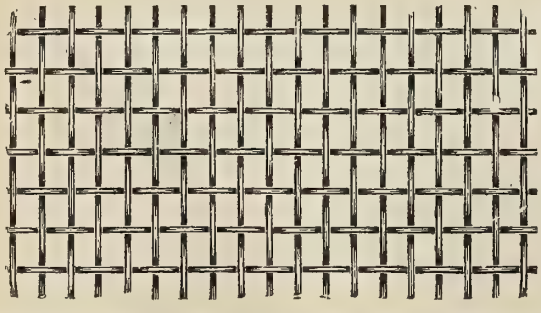
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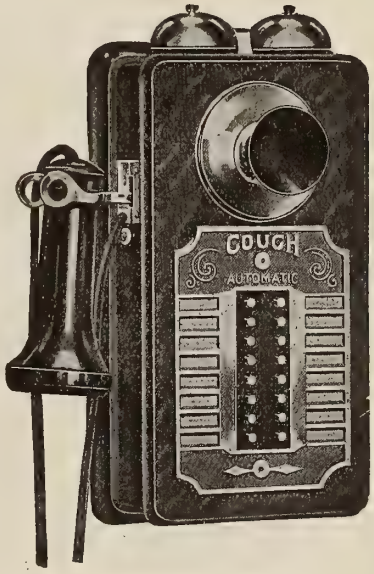
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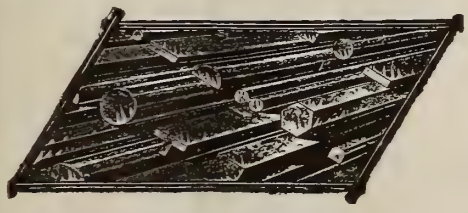
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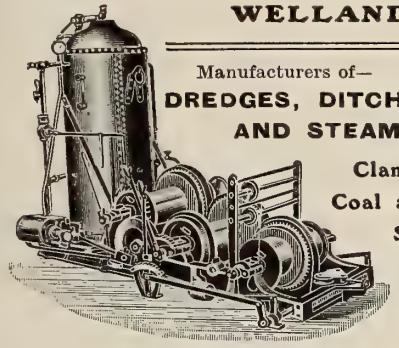
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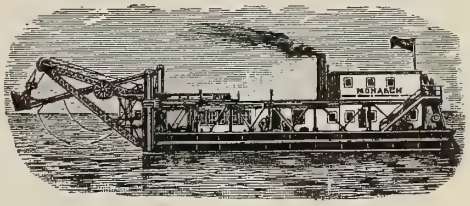
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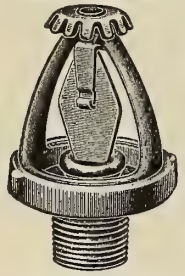
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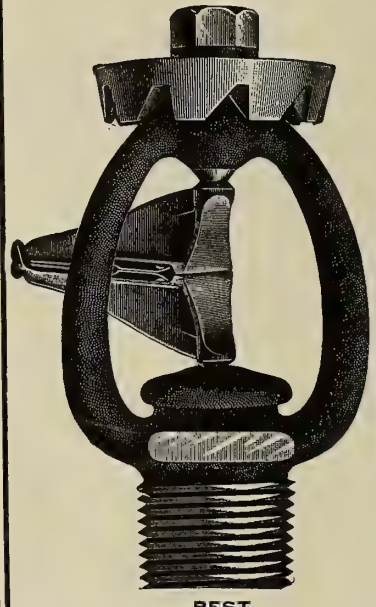
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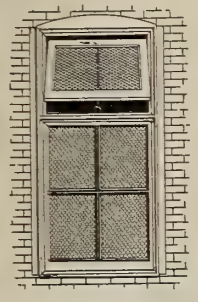


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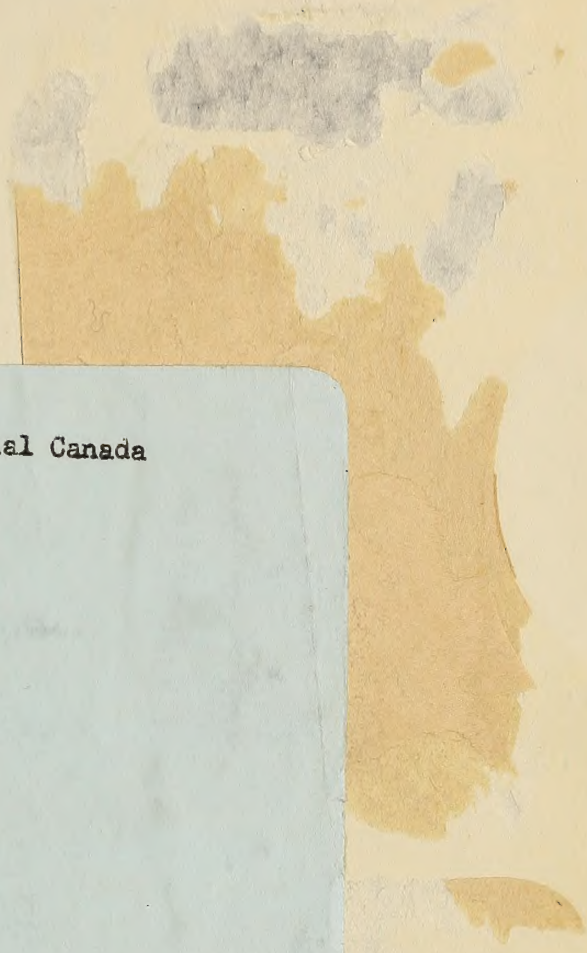
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